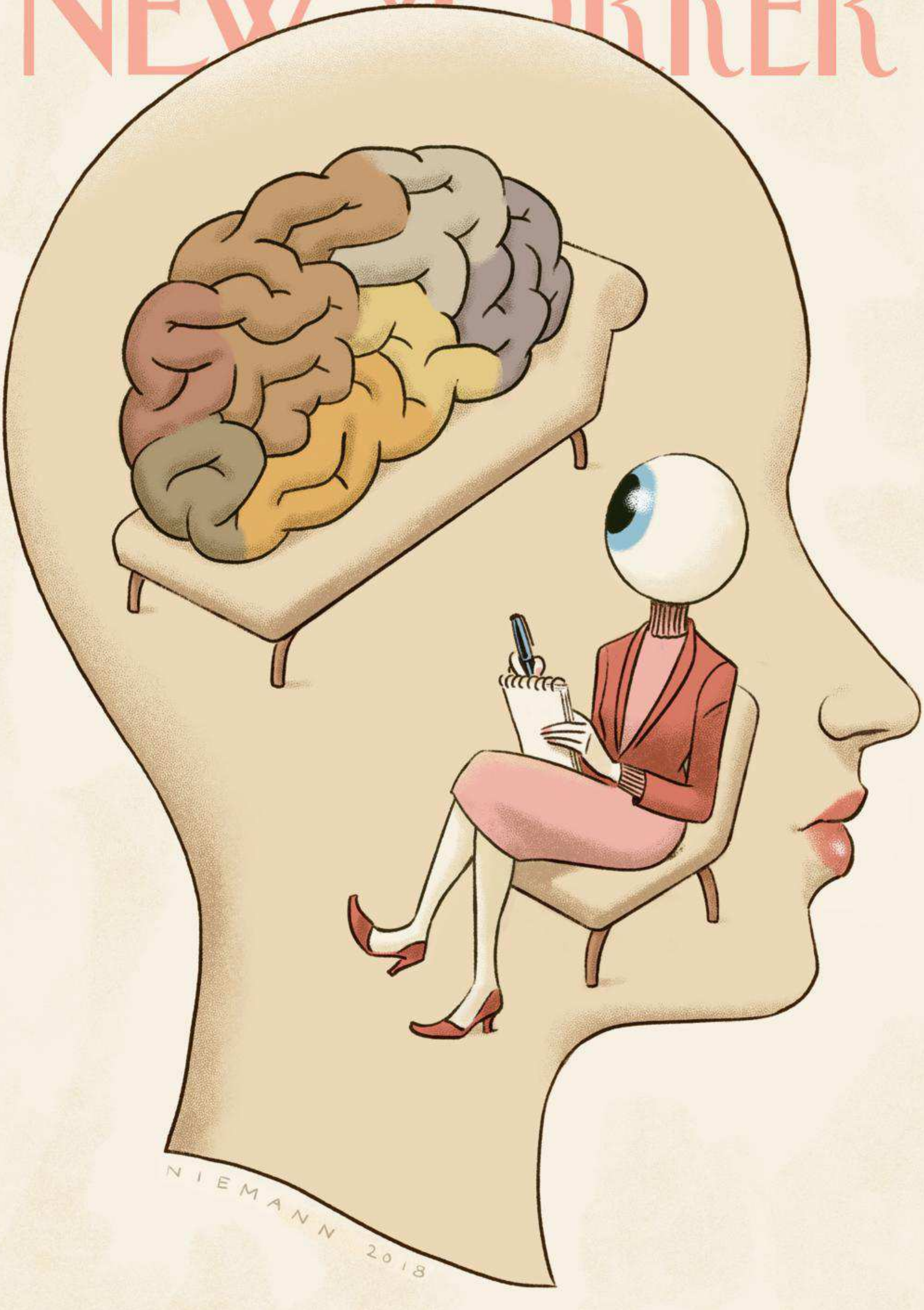
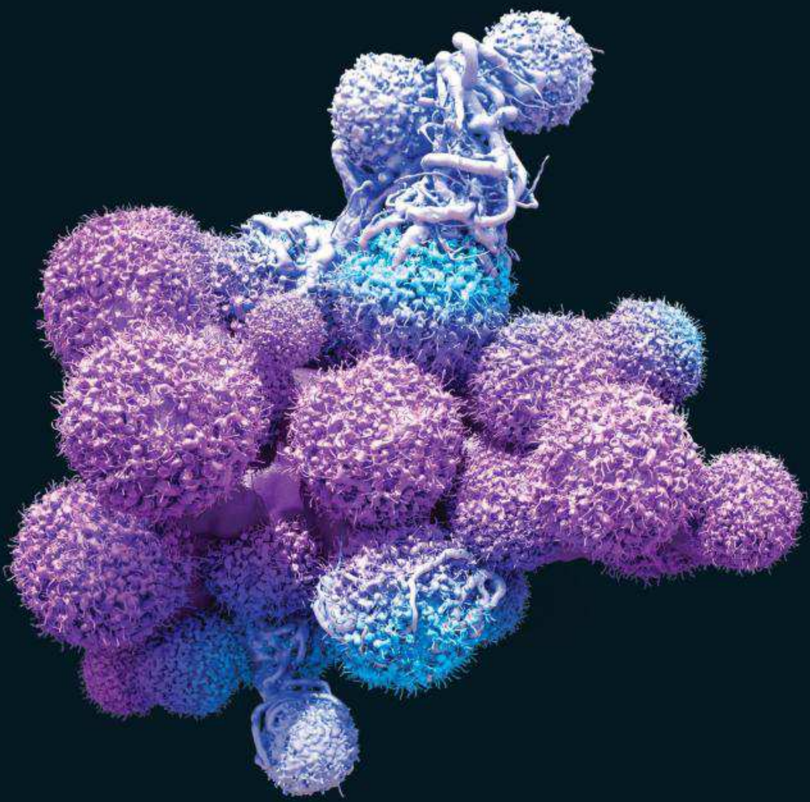
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THE NEW YORKER

APRIL 2, 2018





THE NEW YORKER
THE MIND ISSUE
APRIL 2, 2018

DRAWINGS *Tom Toro, Bruce Eric Kaplan, Zachary Kanin, Roz Chast, Mick Stevens, Paul Noth, Alex Gregory, Charlie Hankin, Sara Lautman, Tom Chitty, P. C. Vey, Seth Fleishman, Pia Guerra, Frank Cotham, Peter Kuper, Glen Baxter, Jason Adam Katzenstein, Joe Dator, David Sipress, Carolita Johnson, Julia Suits* SPOTS *Christoph Niemann*

CONTRIBUTORS

Margaret Talbot (*"Dirty Politics," p. 38*) has been a staff writer at *The New Yorker* since 2004.

Joshua Rothman (*"As Real as It Gets," p. 30*) is the magazine's archive editor and a frequent contributor to newyorker.com.

Jane Shore (*Poem, p. 70*) published her latest book, "That Said: New and Selected Poems," in 2012.

Jeffrey Toobin (*The Talk of the Town, p. 28*) most recently published "American Heiress: The Wild Saga of the Kidnapping, Crimes and Trial of Patty Hearst."

Laura Miller (*Books, p. 90*), the author of "The Magician's Book: A Skeptic's Adventures in Narnia," is a books and culture columnist at Slate.

Jack Handey (*Shouts & Murmurs, p. 37*) has contributed to *The New Yorker* since 1987. He has written several humor books, including, most recently, "Please Stop the Deep Thoughts."

Larissa MacFarquhar (*"Mind Expander," p. 62*), a staff writer and the author of "Strangers Drowning," is an Emerson Fellow at New America.

Gary Greenberg (*Books, p. 84*), a contributing editor at *Harper's*, is a practicing psychotherapist and the author of "The Book of Woe: The DSM and the Unmaking of Psychiatry."

Rachel Aviv (*"The Edge of Identity," p. 52*) won the 2015 Scripps Howard Award for "Your Son Is Deceased," her story on police shootings, which appeared in the magazine.

Christoph Niemann (*Cover*) most recently published "Conversations," with Nicholas Blechman, and "Souvenir."

Sarah Larson (*The Talk of the Town, p. 26*) is a staff writer. Her column, Podcast Dept., appears weekly on newyorker.com.

Sam Allingham (*Fiction, p. 74*) is the author of the story collection "The Great American Songbook."

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PHOTO BOOTH
Masha Gessen on searching for the memory of the Gulags in Putin's Russia.



DAILY SHOUTS
A comic by Glynnis Fawkes provides a guide to the problems of children, written in haiku form.

LEFT: PHOTOGRAPH BY MISHA FRIEDMAN; RIGHT: GLYNNIS FAWKES

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MoMA

Adrian Piper. *Safe #1–4*. 1990. Mixed-media installation. Screenprinted text on four black-and-white photographs, mounted on foam core and affixed to the corners of a room, with audio. Detail: #1 of 4. Collection Adrian Piper Research Archive. Foundation Berlin. © Adrian Piper Research Archive Foundation Berlin

THE MAIL

READING THE DOSSIER

Jane Mayer is alarmed about Russian meddling in the 2016 Presidential election, yet she seems unconcerned that Christopher Steele, a British citizen, was able to meet privately with officials in the United States government in an attempt to stop a candidate from being elected ("The Man Behind the Dossier," March 12th). Why is Russian interference shocking but anti-Trump skulduggery by a well-connected, retired British intelligence officer acceptable? If the Russians are scheming foreigners, then Steele must be one, too.
Hope Leman
Corvallis, Ore.

In pinochle, holding trump cards late in the game often leads to a win. James Comey, as the F.B.I. director in October, 2016, had a trump card for each candidate, but chose to play only one of them. Mayer's summary of the Steele dossier and how it fits into the intelligence surrounding Russia's incursion into the election paints a clear picture of why voters should have seen both cards on the table, or none at all.
Hugh Cavanaugh
Alameda, Calif.

I am a Democrat, and I can see beyond the Trump scandal to my own party's sins. What is the difference between the importance of the Russia investigation and that of the ongoing one concerning the Clinton Foundation? I'd like to learn about the rest of the people working from the sidelines, on behalf of Democrats and Republicans alike.
Susan McHale
Greenwich, Conn.

Mayer relates Steele's claim that Trump's personal lawyer, Michael Cohen, went to Prague to pay off Russian operatives in order to cover up Russia's hacking operation. She writes that Cohen "denies that he's ever set foot in Prague, and has produced his passport to prove it." But, as anyone who travels around the Schengen Area knows, passports are submitted and stamped at the entry point into the zone, and, once you're in, you can move throughout it without passport checks. A lack of a stamp cannot prove that Cohen was not in Prague.
Marshall Winn
Greenville, S.C.

I wish that Mayer would address a question that has been obvious to me from the start: Has James Comey been compromised? He did more to damage Hillary Clinton's campaign (and thereby to accomplish Vladimir Putin's goal) than anyone else. In spite of the Boy Scout persona that Comey cultivates, he violated Department of Justice policy by speaking out—against Clinton—in the last days before the election. And it turns out that the concerns about which he spoke are baseless. Cui bono? Trump and Putin. And now Mayer has added even more troubling information: at the same time that Comey was making public announcements about Clinton, he was failing to react to Steele's dossier or to alert the public about Russian interference. We can't afford not to ask whom Comey is loyal to.
Gwen Spivey
Tallahassee, Fla.

It would seem that Robert Mueller is facing a dilemma: Should he indict Donald Trump, Jr., and Jared Kushner separately, before indicting Trump, or indict them all at once? Wait until November, to see how the elections turn out? Indict the whole family under RICO statutes, as a criminal organization, like the Gambino family? (*The New Yorker* has reported on many of the family's other dealings, and there is more to be explored, such as Kushner's shady loans.) The indictments are likely coming. The question is when and how.
George Magakis, Jr.
Norristown, Pa.

Mayer did her best to keep Steele's credibility in play, but one need not see him either as a part of powerful anti-Russia and anti-Trump U.S. intelligence agencies or as a conscience-driven citizen of the world in order to find much evidence in her reporting of an ego-driven actor who possesses confirmation bias and becomes more and more panicked when no one seems to be listening—which might describe a lot of us in the age of Trump.
Joe R. Struble
Rochester, N.Y.

REDDIT AND FREE SPEECH

Andrew Marantz's article about Reddit's efforts to detoxify the Internet was educational, but his focus on the bad subreddits was disappointing and predictable ("Antisocial Media," March 19th). I spend a lot of time on Reddit, enchanted by its never-ending stream of original, high-quality material, and I've never encountered the toxic content he describes. I couldn't recognize the site from his article. Marantz's bias becomes most evident in his treatment of the social experiment called r/Place; he seems almost disappointed by the lack of swastikas in the final image. I think your readers deserve a follow-up piece focussing on the positive aspects of Reddit.
Eric Holmberg
San Anselmo, Calif.

Marantz gives the impression that free speech on the Internet has failed in a fundamental way. Instead, I would suggest that anonymous free speech on the Internet is what has failed, and the problem wouldn't be that difficult to fix. Insuring that each comment comes from one person with a verifiable e-mail address and only one account on each platform doesn't seem like an infringement of anybody's rights. Speak your mind freely, but own up to it.
Bill Pieper
Sacramento, Calif.

•

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MARCH 28 – APRIL 3, 2018

GOINGS ON ABOUT TOWN



"Spring is like a perhaps hand," E. E. Cummings wrote. Sure enough, this year, on the second official day of spring, New Yorkers were dealt a big maybe-not, when the fourth nor'easter of March arrived. Meanwhile, at the **Brooklyn Botanic Garden,** the Japanese pink pussy willows were already afuzz; soon, the cherry trees will begin to blossom. But, whatever the conditions are like outside, visitors to the Steinhardt Conservatory's Desert Pavilion (pictured above) are guaranteed a stint of warm weather.

PHOTOGRAPH BY PARI DUKOVIC

THE THEATRE

OPENINGS AND PREVIEWS

Between the World and Me
A multimedia theatrical reading of Ta-Nehisi Coates's book about living as a black man in America, conceived by Kamilah Forbes and featuring music by Jason Moran. *(Apollo Theatre, 253 W. 125th St. 800-745-3000. April 2-3.)*

Bobbie Clearly
In Alex Lubischer's comedy, directed by Will Davis for Roundabout Underground, the residents of a Nebraska town tell the story of a murder in a cornfield two years earlier. *(Black Box, Harold and Miriam Steinberg Center for Theatre, 111 W. 46th St. 212-719-1300. In previews. Opens April 3.)*

Carousel
Jack O'Brien directs a revival of the classic Rodgers and Hammerstein musical, starring Joshua Henry, Jessie Mueller, and Renée Fleming. *(Imperial, 249 W. 45th St. 212-239-6200. In previews.)*

Children of a Lesser God
Joshua Jackson and Lauren Ridloff play a teacher and a deaf custodian who meet at a school for the deaf, in Kenny Leon's revival of the 1980 romantic drama by Mark Medoff. *(Studio 54, at 254 W. 54th St. 212-239-6200. In previews.)*

Harry Potter and the Cursed Child, Parts One and Two
J. K. Rowling's tale picks up nineteen years after the novels end, in this play by Jack Thorne, staged by John Tiffany in two installments. *(Lyric, 214 W. 43rd St. 877-250-2929. In previews.)*

The Iceman Cometh
Denzel Washington stars in George C. Wolfe's revival of the Eugene O'Neill drama, set in a Greenwich Village saloon populated by dead-end dreamers. *(Jacobs, 242 W. 45th St. 212-239-6200. In previews.)*

The Lucky Ones
The folk duo the Bengsons composed this semi-autobiographical musical about family tragedy and teen-age passion; Anne Kauffman directs the Ars Nova production. *(Connelly, 220 E. 4th St. 212-352-3101. In previews. Opens March 31.)*

Mean Girls
This musical version of the teen comedy has songs by Jeff Richmond and Nell Benjamin, direction by Casey Nicholaw, and a book by Tina Fey, who updated her 2004 screenplay. *(August Wilson, 245 W. 52nd St. 877-250-2929. In previews.)*

Miss You Like Hell
Daphne Rubin-Vega plays an undocumented immigrant with an estranged sixteen-year-old daughter in this new musical by Quiara Alegría Hudes and Erin McKeown, directed by Lear deBessonet. *(Public, 425 Lafayette St. 212-967-7555. In previews.)*

Mlima's Tale
Lynn Nottage's new play, directed by Jo Bonney, traces the journey of an elephant (Sahr Ngaujah) stuck in the international ivory trade. *(Public, 425 Lafayette St. 212-967-7555. In previews.)*

My Fair Lady
Lerner and Loewe's classic 1956 musical returns to Broadway, in a Lincoln Center Theatre revival directed by Bartlett Sher and starring Lauren Ambrose, Harry Hadden-Paton, and Diana Rigg. *(Vivian Beaumont, 150 W. 65th St. 212-239-6200. In previews.)*

Saint Joan
Condola Rashad plays Joan of Arc in the George Bernard Shaw drama, revived by Manhattan Theatre Club and directed by Daniel Sullivan. *(Samuel J. Friedman, 261 W. 47th St. 212-239-6200. Previews begin April 3.)*

The Seafarer
Matthew Broderick stars in Ciarán O'Reilly's revival of the Conor McPherson drama, in which a stranger arrives at a Dublin home during a Christmas Eve poker game. *(Irish Repertory, 132 W. 22nd St. 212-727-2737. Previews begin March 30.)*

Summer
Des McAnuff directs a musical based on the life and work of the disco queen Donna Summer, with three actresses—LaChanze, Ariana DeBose, and Storm Lever—sharing the title role. *(Lunt-Fontanne, 205 W. 46th St. 877-250-2929. In previews.)*

This Flat Earth
Lindsey Ferrentino's new play, directed by Rebecca Taichman, follows two thirteen-year-olds in a seaside town that has suddenly become the focus of national attention. *(Playwrights Horizons, 416 W. 42nd St. 212-279-4200. In previews.)*

Three Tall Women
Glenda Jackson, Laurie Metcalf, and Alison Pill portray the same woman at different ages in Edward Albee's play, which won the 1994 Pulitzer Prize for Drama. Joe Mantello directs. *(Golden, 252 W. 45th St. 212-239-6200. In previews. Opens March 29.)*

Travesties
The Roundabout imports Patrick Marber's Menier Chocolate Factory revival of the Tom Stoppard comedy, in which an old man recalls his encounters with James Joyce, Lenin, and the artist Tristan Tzara in 1917 Zurich. *(American Airlines Theatre, 227 W. 42nd St. 212-719-1300. Previews begin March 29.)*

NOW PLAYING

Admissions
One of the squirmiest plays of the season, Joshua Harmon's prickly comedy congratulates the liberal bona fides of its audience, then uses those same values to blackjack them. At a leafy boarding school in rural New Hampshire, the admissions director, Sherri (Jessica Hecht, typically excellent), and the headmaster, Bill (Andrew Garman), have successfully increased diversity. But when their own son, Charlie (Ben Edelman), is denied early admission to Yale, while his biracial best friend is accepted, the family has to reckon with what they're willing to sacrifice for their principles. (Spoiler: not much.) As Charlie says, "You're happy to make the world a better place, as long as it doesn't cost you anything." Under Daniel Aukin's polished direction, the structure is too pat and the characterizations too streamlined, but the play expertly indicts the people most likely to applaud it. *(Mitzi E. Newhouse, 150 W. 65th St. 212-239-6200.)*

Dido of Idaho
Auden said it best: about suffering they were never wrong, the Old Masters. Abby Rosebrock's tragicomedy draws its title and setup from Virgil's doomed queen of Carthage, spurned lover of Aeneas. Nora (Layla Khosh) is a boozy musicologist hopelessly entangled with Michael (Curran Connor), a poet and professor married to a homily-spouting former beauty-pageant contestant (Rosebrock). As Nora's romantic life violently unravels, she is sent reeling back to her haunted past with her disapproving, evangelical mother (Dalia Davi). Propelled by ferocious and often funny dialogue, the play offers a study in the varieties of modern alienated womanhood. But it too often withdraws from the potential richness of its contrasting character portraits and devolves into a confused pastiche of genre and tone—part parody of self-help culture, part gothic fantasy, and part celebration of #MeToo feminism. *(Ensemble Studio Theatre, 545 W. 52nd St. ensemblestudiotheatre.org.)*

Frozen
The Disney juggernaut takes its inevitable victory lap on Broadway, directed by Michael Grandage. In the northern land of Arendelle, Princess Anna (the winning Patti Murin, a skilled comedian) is estranged from her older sister, Elsa (the silver-voiced Caissie Levy), whose magic powers to turn things to ice are hidden from Anna after a childhood accident. The rudimentary projections and slow-moving ice sets are an unfortunate downgrade from the animation, and most of the dozen new songs added by the original songwriters, Kristen Anderson-Lopez and Robert Lopez, are unremarkable. But the show has its attractions: the fantastic diverse cast (including Jelani Alladin, adorable as the strapping ice-monger Kristoff); Elsa's electric costume change at the climax of "Let It Go," still the most persistent earworm of the Disney œuvre; and the hilarious second-act number "Hygge," about the Scandinavian concept of coziness, complete with a sauna-themed kick line. *(St. James, 246 W. 44th St. 866-870-2717.)*

Harry Clarke
David Cale's louche one-man drama is back for a return engagement produced by Audible, which has also released it as an audio play. But there's good reason to see it in person: namely, Billy Crudup's full-bodied performance as the title character (and multiple other people). Harry Clarke doesn't exist—he's the invention of one Philip Brugglestein, a shy, queer boy from the Midwest who discovers his confidence, and his seductive powers, in the form of a Cockney alter ego. Harry worms his way into the life of a handsome stranger, with funny, sexy, and devastating results. Cale's script has the tidy structure—and the mounting implausibilities—of a three-act screenplay. But, like Harry, its sleekness belies a more troubled tale about the psychic costs of passing, whether as a gay man in a straight world or as an Ohio sissy whose truest self turns out to be a swinging Londoner. *(Minetta Lane Theatre, 18 Minetta Lane. 800-745-3000.)*

The Low Road
The theatre where "Hamilton" was born presents the anti-"Hamilton": Bruce Norris's lengthy but propulsive picaresque, which follows the misadventures of a decidedly unlovable antihero in

late-eighteenth-century America. Jim Trewitt (Chris Perfetti) single-mindedly applies free-market principles to every predicament, to the great misfortune of all those he encounters. Directed with aplomb by Michael Greif, in its U.S. début—it was previously mounted in London, in 2013—the play is performed by a perfectly cast ensemble of eighteen. Norris's script methodically, hilariously, and, in the most pointed moments of a consistently dagger-sharp show, self-reflexively punctures any impulse to seek inspiration from the origin story of the United States, particularly its homegrown, contagious strain of ingeniously exploitative capitalism. It's sort of like an exasperated leftist's version of Voltaire's "Candide," if it had been rewritten with the specifically American dark-comic cynicism of Nathanael West. The wigs, by J. Jared Janas and Dave Bova, are outstanding. *(Public, 425 Lafayette St. 212-967-7555.)*

My Brilliant Divorce
A young woman is whisked away by a dashing man, who later dumps her for a newer model. Can she rebuild her sense of self in middle age, and learn to fly on her own? (Yes, she can.) It's a familiar story, and Geraldine Aron gives it a familiar treatment in this solo play, directed by Aedín Moloney. Melissa Gilbert has a warm presence as Rachel, tamping down the character's neurotic, clueless side. But the role is an agglomeration of clichés—and still not as tired as that of Rachel's overbearing Jewish mother, who regularly intervenes to nag her daughter about the road not taken. During three years, Rachel enters the dating marketplace, buys her first vibrator, and becomes an Airbnb host. She has made it through, just as we knew she would. *(New Ohio, 154 Christopher St. 866-811-4111.)*

Old Stock: A Refugee Love Story
It's 1908, and two young Romanian Jews (Chris Weatherstone and Mary Fay Coady) meet while awaiting medical inspection before entering Canada. So begins the darkly funny and moving true story of the playwright Hannah Moscovitch's great-grandparents. Much of what follows takes the form of a neo-klezmer musical, with instrumentation ranging from banjo and accordion to megaphone. Ben Caplan, a high-energy folk virtuoso with a leonine beard, supplies the gravelly vocals and narration. The show's self-aware and ironic title derives from a dog-whistle term ("old stock") used to set apart Canadians whose families arrived generations ago from more recent arrivals. Even if some of the symbolism is too on the nose (the set is a converted shipping container), it is hard to imagine a more apt time for a production with so clear a moral center. *(59E59, at 59 E. 59th St. 212-279-4200.)*

ALSO NOTABLE

The Amateurs Vineyard. *Through March 29*. • **Amy and the Orphans** Laura Pels. • **Angels in America** Neil Simon. • **Bright Colors and Bold Patterns** SoHo Playhouse. • **Escape to Margaritaville** Marquis. • **Good for Otto** Pershing Square Signature Center. • **Is God Is** SoHo Rep. *Through March 31*. • **Jerry Springer—The Opera** Pershing Square Signature Center. *Through April 1*. • **Kings** Public. *Through April 1*. • **Later Life** Clurman. • **Lobby Hero** Helen Hayes. • **Once on This Island** Circle in the Square. • **Rocktopia** Broadway Theatre. • **Three Small Irish Masterpieces** Irish Repertory. • **Three Wise Guys** Beckett. • **The Winter's Tale** Polonsky Shakespeare Center. • **Yerma** Park Avenue Armory.



DANCE

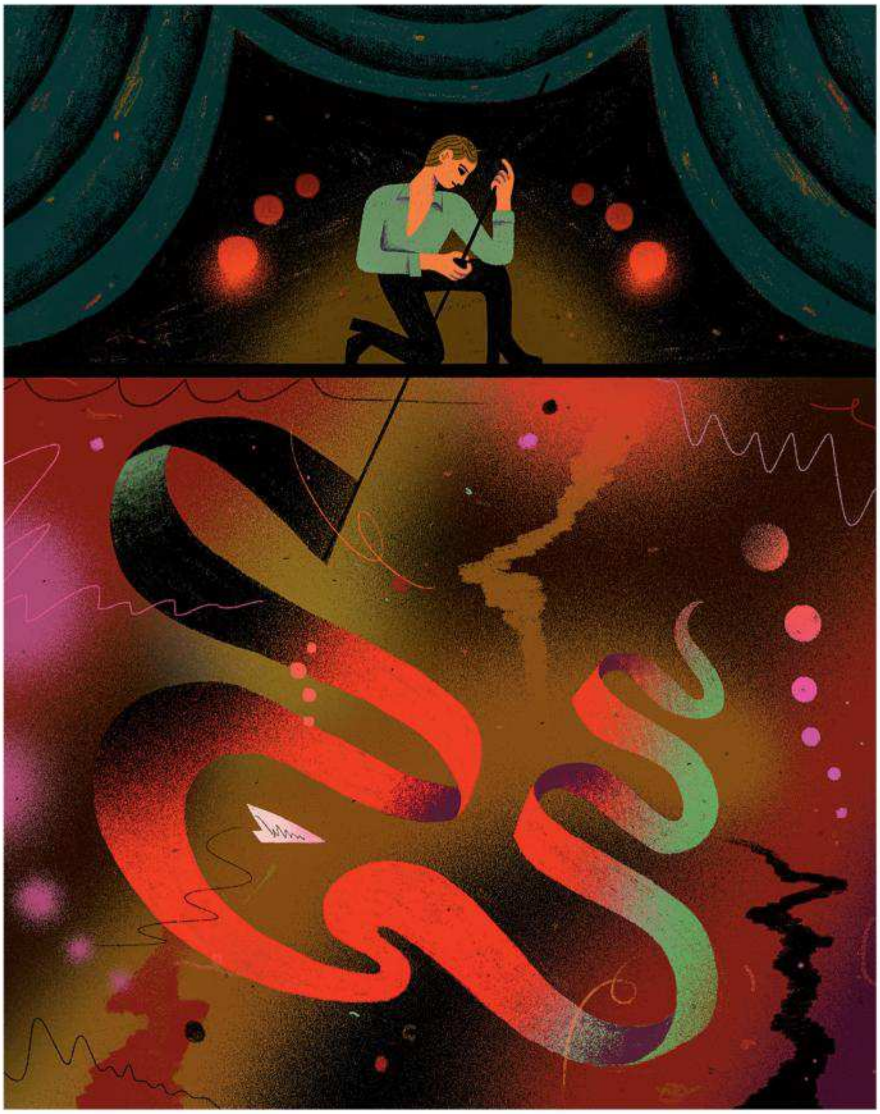


ILLUSTRATION BY ARIEL DAVIS

Aquacade

Basil Twist's underwater puppet show, "Symphonie Fantastique," returns.

Most people, when they think of puppets, are put in mind of the sock puppet that their third-grade teacher brought into class to tell them to brush their teeth. Much harder to learn is a marionette, such as Howdy Doody, which is operated, on strings, from high above the puppet's head.

But until recently there was probably no such thing as an abstract puppet. "Or, if there was," the forty-eight-year-old master puppeteer Basil Twist says, "there weren't that many. That's kind of why I did it." One day, twenty years ago, Twist was walking down his block, and he saw a ten-gallon fish tank that someone had put out for the garbage collectors. It had a crack in it. " 'Hmm,' I said, and I lugged it home, and I covered the crack with duct tape, and I filled the thing with water. I put a piece of silk on the end of a coat hanger, and I dragged it through the water. It looked fantastic." Twist had just received his first grant, a thousand dollars, from the Jim Henson Foundation. So he went out and bought the biggest fish tank he could find, and started sticking other things into it. "Almost everything," he says, "when you put it under water, is transformed and looks great. You put a black garbage bag under water, it looks great. Cotton balls, not so good. But feathers, great."

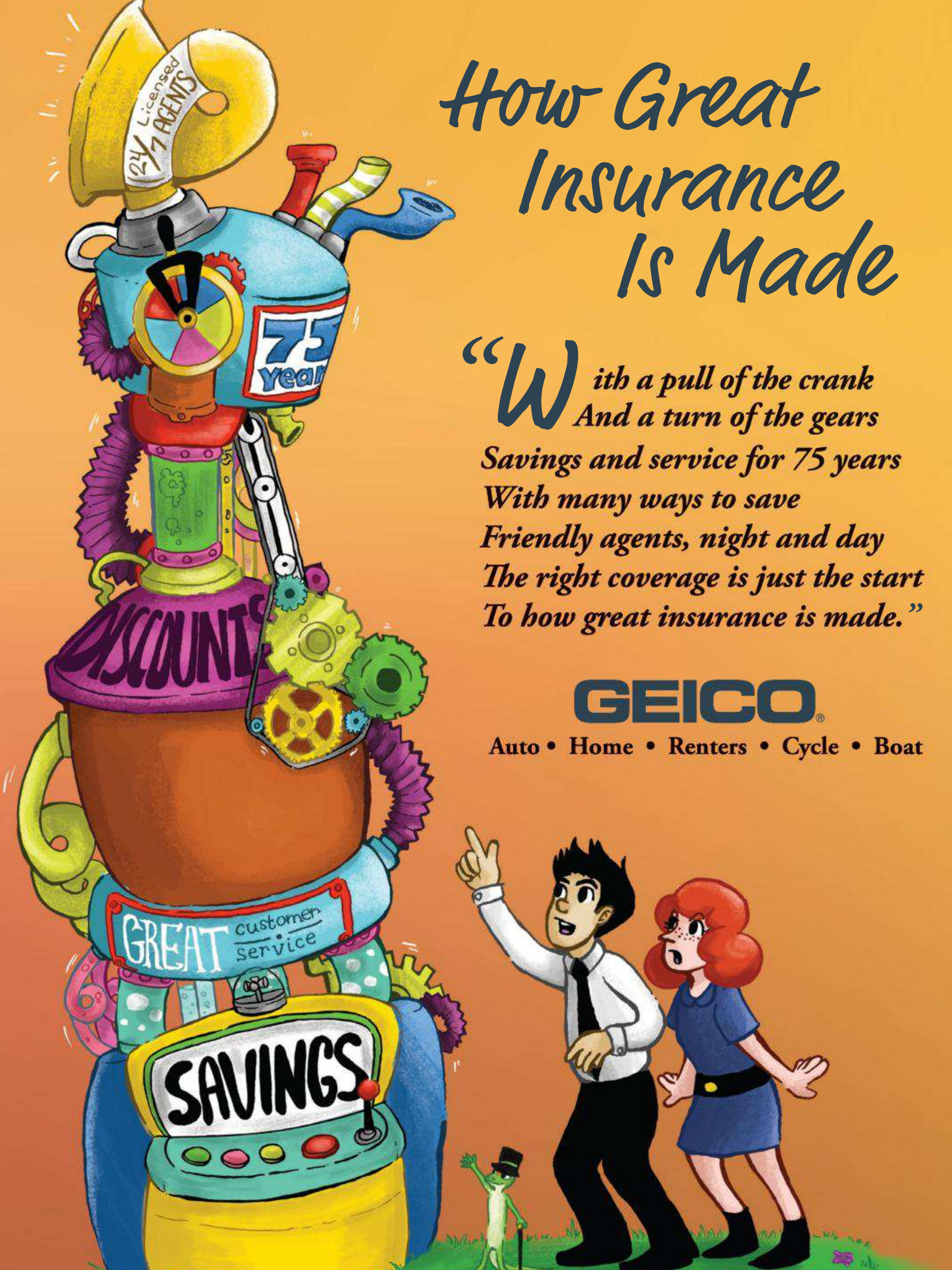
He knew he needed music for the show that was now taking shape in his mind. He finally settled on Berlioz's "Symphonie Fantastique." He named his show after Berlioz's piece and premièred it in the basement theatre of the performance complex called HERE, on Dominick Street. Hitherto a storage facility, the space was spiffed up with the financial help of Twist's grandmother and named after her. It is the Dorothy B. Williams Theatre.

On March 29, in honor of its twentieth anniversary, "Symphonie Fantastique" is being revived at HERE, for a twelve-week run. The show has just about everything: sparkles, like fairy dust; blue disks that bump into each other, like who the hell are you; skinny, hatted things that look like enoki mushrooms growing upside down. Twice I'm sure I saw an egg frying in a pan. There is also something whirling in a circle, like an enraged doughnut; then, marvellously, a black thing flying across a bronze-colored sun.

It is known that Berlioz included in his "Symphonie" a motif representing an Irish actress he was obsessed with, Harriet Smithson. Where, in the goings on in this tank, is Harriet? I don't know. Twist will not do Harriet identifications. All he will say is that Harriet is always white. And again and again as the show progresses we see a tiny white thing, in the shape of Robin Hood's hat, sailing serenely through. Is that you, Harriet?

After the performance, the five puppeteers will invite you backstage to tell you how it all works. Wear your galoshes. And reserve early. When the show premièred, the *Wall Street Journal* said it was New York's hottest ticket outside "The Lion King." This year's incarnation may be hotter still. The tank has grown to a thousand gallons, and there will be live music: the excellent pianist Christopher O'Riley playing Liszt's arrangement of "Symphonie Fantastique."

—*Joan Acocella*



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SAVINGS

Davalois Fearon
Earlier this year, the East Village institution formerly known as Performance Space 122 unveiled its new theatres at the top of its original building (and changed its name to the more generic Performance Space New York). Its old stage on the second floor was taken over by the venerable theatre collective Mabou Mines, which can now present other artists. Among the initial crop is Fearon, a budding choreographer still best known as a standout dancer with Stephen Petronio. Her "Time to Talk" is a multidisciplinary piece that addresses, rather didactically, racial bias in academia and dance. *(Mabou Mines, First Ave. at 9th St. 866-811-4111. March 27-29.)*

Joanna Kotze
In her 2015 piece "Find Yourself Here," Kotze put visual artists—including her husband, Jonathan Allen—onstage and made them move. The result was eccentric and mostly fun. Her new work, "What Will We Be Like When We Get There," continues in an interdisciplinary mode, with the gawky choreographer joined by Allen, the articulate dancer Netta Yerushalmy, and the composer Ryan Seaton. In-progress performances of the work have suggested smart, kooky kids playing in a junk pile. The potential for exciting spontaneity is there, but so is the danger of idling. *(New York Live Arts, 219 W. 19th St. 212-924-0077. March 28-31.)*

Anna Sperber
Sperber's formalism can be dutiful and lacking in urgency, but not when her aggressive streak kicks in. So there's something promising in the setup for "Wealth from the Salt Seas," which has the choreographer whipping weighty electrical cables into waves. It sounds like a badass ribbon dance. The composer and experimental vocalist Gelsey Bell is on hand to help make powerful vibrations. *(The Chocolate Factory, 5-49 49th Ave., Long Island City. 866-811-4111. March 28-31.)*

Annie Wilson / "At Home with the Humorless Bastard"
In her eccentric one-woman show, the Philadelphia-based choreographer and performance artist plays with the conventional relationship between viewer and performer. Wilson climbs into a tub onstage, soaks in glitter, invites audience members to dance with her, and orchestrates a sing-along, all in the name of creating a moment of intimacy among strangers. *(JACK, 505½ Waverly Ave., Brooklyn. jackny.org. March 29-31.)*

Basil Twist / "Symphonie Fantastique"
This musical puppet extravaganza, which premièred twenty years ago, put the puppeteer Basil Twist on the map; he has since gone on to work on Broadway, in opera, and in the movies. To Berlioz's fantastical score, Twist's puppeteers create a world out of bits of fabric, plastic, and tinsel, all moving in mesmerizing slow motion inside a giant tank filled with water. Not to be missed. *(HERE, 145 Sixth Ave., near Spring St. 866-811-4111. March 29-April 1 and April 3. Through June 17.)*

"Works & Process" / Nederlands Dans Theatre
Long known as the house of Hans van Manen and Jiří Kylián, this world-class Dutch contemporary-dance troupe has in recent decades been dominated by the work of the choreographic duo Paul Lightfoot and Sol León. Here, company members perform excerpts of their pieces "Shoot the Moon" (2006) and "Singulière Odysée" (2017), and there will be a discussion with the choreographers. *(Guggenheim Museum, Fifth Ave. at 89th St. 212-423-3575. March 31.)*

ART

MUSEUMS AND LIBRARIES

Metropolitan Museum
"William Eggleston: Los Alamos"
"It's as if red is at war with all the other colors," reads one of the quotes by Eggleston that visitors encounter among seventy dye-transfer photographs in this stunning exhibition. The portfolio, which was named for the Los Alamos National Laboratory, in New Mexico, is being exhibited in its entirety in New York for the first time. The images—of landscapes both verdant and desolate, decrepit architecture, and the found poetry of roadside signage—were printed in 2002, from negatives shot between 1965 and 1974, in the Mississippi Delta region (where the photographer lives) and on road trips to Las Vegas and Los Angeles, among other locations. Car upholstery appears as slick and bright as fresh blood; Coca-Cola ads, ketchup bottles on a fast-food counter, and Valentine's Day decorations in a supermarket window lend the scenes a hyperreal intensity. *Through May 28.*

Museum of Modern Art
"Tarsila do Amaral: Inventing Modern Art in Brazil"
Some artists are so iconic they're known by only one name: Brancusi, Léger, Tarsila. Wait, who? Tarsila do Amaral is so famous in her native Brazil that, forty-three years after her death, a motif from one of her paintings helped close out the 2016 Rio de Janeiro Olympics. That chimerical landscape, "Setting Sun," from 1929, hangs now in the artist's first-ever museum exhibition in the United States. Paintings are the main event here, notably Tarsila's perversely proportioned nudes, including "Abaporu," made in 1928. Seated in a stripped-down landscape—green ground, a greener saguaro, blue sky, and a lemon-yellow disk that splits the difference between flower and sun—a figure is portrayed in the pose of a thinker, with a tiny head resting on a spindly arm and a monstrously swollen foot, as if the intellect were dwarfed by the body's sensations. The painting's brazenly tropical modernism inspired the poet Oswald de Andrade to write the "Manifesto of Anthropophagy," a call to cannibalize foreign influences, which resounded in Brazilian culture for decades. This sublimely weird show is an eye-opening corrective to an art history that has treated key chapters—those that aren't Eurocentric—as if they were written in invisible ink. As Andrade wrote in his manifesto, "Joy is the decisive test." *Through June 3.*

Bronx Museum
"Gordon Matta-Clark"
The SoHo-reared son of two artists (the Chilean Roberto Matta and the American Anna Louise Clark), Matta-Clark was a self-described "anarchitect" who made daring interventions in urban environments until his untimely death, in 1978, at the age of thirty-five. For his 1975 project "Day's End," the artist filmed himself cutting a half-moon shape from the front of an abandoned warehouse on a Manhattan pier, with the aid of pulleys and a chainsaw. He described the results as a "sun-and-water temple," but worship was cut short when the police arrived with an arrest warrant. One high point here is an extensive photographic archive of subway graffiti and the controversial "Conical Intersect," also performed in 1975, for which Matta-Clark cut pieces out of the façades of two historic houses in Paris's Les Halles neighborhood. (Though the buildings were already slated for demolition, the artist was nonetheless criticized for helping to destroy them.) This essential retrospective is jam-packed with photographs and films documenting these and other projects, such as Matta-Clark's hybrid of "happening" and restaurant, FOOD. Especially noteworthy, given the context, are stunning pictures of big square holes cut in the floors of abandoned buildings in the South Bronx, both a powerful critique of the deliberate devaluation of real estate in marginalized neighborhoods and a memorial to derelict beauty. *Through April 8.*

Morgan Library and Museum
"Peter Hujar: Speed of Life"
Hujar, who died of AIDS-related pneumonia in 1987, at the age of fifty-three, was among the greatest of all American photographers and has had, by far, the most confusing reputation. This dazzling retrospective of a hundred and sixty-four pictures, curated by Joel Smith, affirms Hujar's excellence while, if anything, complicating his history. The works range across the genres of portraiture, nudes, cityscape, and still-life—the stillest of all from the catacombs of Palermo, Italy, shot in 1963. The finest are portraits, not only of people but of cows, sheep, and, most notably, an individual goose, with an eagerly confiding mien. The quality of Hujar's prints, tending to sumptuous blacks and simmering grays, transfixes. He was a darkroom master, maintaining technical standards for which he got scant credit except among certain cognoscenti. He never hatched a signature look to rival those of more celebrated elders who influenced him (Richard Avedon, Diane Arbus) or those of younger peers who learned from him (Robert Mapplethorpe, Nan Goldin). His pictures share, in place of a style, an unfailing rigor that can only be experienced, not described. *Through May 20.*

Museum of the Moving Image
"The Game: The Game"
In a previous project, the multimedia artist Angela Washko staged feminist interventions in the online multiplayer game World of Warcraft, a virtual space rife with misogynistic trolling. Here, she presents an interactive video derived from a pervasive real-life game. Players seated at a station, headphones on, find themselves in the role of easy prey: a young woman at a bar, awaiting a late friend. Washko culled her dialogue from the instructional materials of six so-called seduction coaches, or pickup artists, who offer techniques for inept straight men looking to score, so to speak. These experts are the basis for her game's aggressive characters, whose come-ons are by turns entertaining, irritating, and harrowing. A soundtrack by the experimental band Xiu Xiu heightens the anxiety provoked by their high-pressure tactics, while Washko's simple, gritty design, constructed from digitally manipulated cyanotypes, captures the lurid light and close quarters of a barroom. In her ingenious reconstruction of complex social encounters, there is no standard measure for winning. Instead, players, while navigating the game's multiple-choice menus, are offered insight into a pickup artist's warped reasoning, and given the chance to redo an evening gone wrong. *Through April 1.*

Rubin Museum of Art
"Chitra Ganesh: The Scorpion Gesture"
The Brooklyn artist's new animations ingeniously combine her own drawings and watercolors with his-

torical imagery, peppering the journeys of bodhisattvas with contemporary pop-culture references. Five of these pieces are installed on the museum's second and third floors amid its collection of Himalayan art, elements of which appear in her psychedelic sequences of spinning mandalas and falling lotus flowers. (Ganesh's works are activated, as if by magic, when viewers approach.) In "Rainbow Body," a cave, which also appears in a nearby painting of Mandarava, is filled with people in 3-D glasses, watching as the guru-deity attains enlightenment. "Silhouette in the Graveyard" is projected behind a glass case containing a small sculpture of Maitreya, from late-eighteenth-century Mongolia, for a cleverly dioramalike effect. Prophesied to arrive during an apocalyptic crisis, the bodhisattva is seen here against Ganesh's montage, which includes footage of global catastrophes and political protests, from the Women's March to Black Lives Matter. *Through Nov. 4.*

GALLERIES—UPTOWN

Allan Kaprow

Kaprow is best known for inventing "happenings," a term he coined sixty years ago in the essay "The Legacy of Jackson Pollock." But he started out as a painter, as this museum-quality show makes sensationally clear. Several mid-fifties views of the George Washington Bridge, portraying both the bridge and the sky with bars of glowing color, may bring to mind the early realist work of Piet Mondrian. Two "action collages" from the same period, incorporating jagged pieces of foil and fabric, are nearly transcendental in their exuberance. A series of colorful, vigorously impastoed portraits push against formal limits with strange cropping. By the nineteen-seventies, Kaprow was making extremely simple charcoal drawings of lines and circles, inspired by Zen breathing exercises. The energy of the assembled works is so consistently restless that it suggests an artist for whom one medium alone would never suffice. As Kaprow inscribed on the stretcher bars of his 1955 canvas "Standing Nude Against Red and White Stripes," "I will always be a painter. Of sorts." *Through April 7. (Hauser & Wirth, 32 E. 69th St. 212-794-4970.)*

"Kiss Off"

This eighteen-person meditation on a Hallmark-worthy theme (the subject of kisses in art) steers clear of schmalz, thanks to the smarts of its curator, Francesco Bonami. It opens with a 1970 lithograph of undulating red lipstick marks, made by the experimental filmmaker Joyce Weiland while she sang "O Canada." The work hangs next to the show's title piece, "Kiss Off," made a year later (in Canada) by Vito Acconci (1940-2017), who applied lipstick to his mouth, kissed his hand, and transferred the marks to a lithography stone. The show closes with another game of compare and contrast. In Francis Picabia's strange, brightly colored "Couple de Monstres," from 1925-27, lovers are seen in an embrace. Nearby, in Felix Gonzalez-Torres's heartrending untitled sculpture, two rings of silver-plated brass hang side by side on a wall, so close that they appear fused together—but, in fact, they're not touching at all. *Through April 14. (Luxembourg & Dayan, 64 E. 77th St. 212-452-4646.)*

GALLERIES—CHELSEA

Arlene Gottfried

Aptly titled "A Lifetime of Wandering," this posthumous exhibition of the photographer's street scenes and portraits captures New York's demimonde of the nineteen-seventies and eighties from a warm and impromptu perspective. Among Gottfried's coöperative subjects were Brooklyn beachgoers, Harlem gospel singers, and disco-era clubbers, as well as underground icons and international celebrities. A shot of the transgender activist and performer Marsha P. Johnson shows her posing with a wide smile in the middle of the street. Diana Ross, standing by a wall and dressed to blend in, likewise beams for the camera. Gottfried, who died last year, at the age of sixty-six, also photographed those closest to her. One of the show's high points is "Mommie Kissing Bubbie on Delancey Street," from 1979, which celebrates two generations of her Jewish immigrant family in an unguarded moment on the Lower East Side. *Through April 28. (Cooney, 508 W. 26th St. 212-255-8158.)*

Deana Lawson

A viewer looking too quickly at the saturated images, displayed in large gold frames, in Lawson's first solo show in New York City might think that they were found family photographs. The scenes look natural, arranged in lived-in kitchens and living rooms, and yet, in their organization, distantly painterly. (The artist counts acrylic nails, Notorious B.I.G., and her mother as inspirations; one may also detect the manipulated vérité of Lorna Simpson, Philip Kwame Apagya, and Lauren Greenfield as influences.) Lawson proudly appropriates a popular black aesthetic, absorbing modes as varied as those found in old issues of *Jet* and in hip-hop souvenirs; she has a knack for identifying the strangely potent components of interiors that mean nothing and so much. Take "Seagulls in Kitchen," a portrait of two strangers, a man and a woman who allowed Lawson to shoot them as lovers. The title refers to a wall decoration, the kind of sweet ornament that, were the tableau real, would almost certainly be accompanied by a story. The couple prom pose, the man plaiting his hands over her soft torso. Tattoos on oiled brown skin are reminders of prior lives, food on the shelf of the present one. Flickers of the couple's personalities are awakened and then drowned out by the eye that placed these subjects just so. *Through April 7. (Sikkema Jenkins, 530 W. 22nd St. 212-929-2262.)*

GALLERIES—DOWNTOWN

Jacolby Satterwhite

Pick up a pink glow-stick bracelet on your way into "Blessed Avenue," Satterwhite's impressive début with the gallery. A large screen bisects the black-walled space, playing a hallucinatory video—a Boschian sci-fi tableau—which attests to the artist's command of digital animation and 3-D-modelling software. In the endless simulated shot, dancers and S & M performers populate a gay mega-club, a maze of fragmented machinery apparently adrift in space. The dystopian scene has a surprisingly poignant twist: the action is set to an electronic soundtrack created from cassette tapes of the artist's mother, singing a capella. In the accompanying installation, a conceptual boutique, the artist hawks affordable items from pill organizers to tambourines, all printed with dashed-off drawings and charming, handwritten notes. *Through May 6. (Brown, 291 Grand St. 212-627-5258.)*



"Iskander Fights Against the Russians," a rare Persian manuscript folio from 1562, is on view in "Romance and Reason: Islamic Transformations of the Classical Past," at the Institute for the Study of the Ancient World, at New York University.

MOVIES



Hu Bo's only feature, "An Elephant Sitting Still," screening in New Directors/New Films, depicts high-school students confronting gangland violence.

Social Studies

Two new films showing historical forces in local action have New York premières.

This year's edition of New Directors/New Films, held March 28-April 8 at Film Society of Lincoln Center and MOMA, offers the U.S. première of a movie, "An Elephant Sitting Still," that should become an enduring classic—albeit one that arrives shadowed by tragedy. It's the sole feature by the director Hu Bo, who, after completing it, committed suicide, at the age of twenty-nine, in October, 2017.

Hu's vast ambition is suggested by his film's three-hour-and-fifty-minute running time. (It screens April 1 and April 8.) With its distinctive and hard-forged drama, style, and mood, it presents a comprehensive, diagnostic cross-section of China's grave civic maladies and their intimate, agonized expressions. The story is centered on a day in the lives of four residents of run-down apartment buildings in a decaying industrial region: a high-school boy who accidentally kills a bully in a stairwell fight and flees the victim's brother, a gangster; a high-school girl who is having an affair with the school's vice-dean and fears the release of an incriminating video; a small-time criminal whose affair with a woman results in her boyfriend's suicide; and an elderly man whose son is forcing him out of his apartment and into a nursing home.

Most of the scenes run five minutes or more, composed in long takes that follow a restless array of characters through apartments and corridors, alleys and courtyards, train stations and industrial wastelands—but the kinetic cinematography (by Fan Chao) freezes into tense, painterly tableaux of bitter confrontations pregnant with violence. Hu's characters rarely miss a chance to inflict emotional and physical pain on one another, and the movie's relentless cruelty is a mark of its tacitly political fury. There's nothing arch or artificial about Hu's drastic distensions of cinematic time; his volatile silences and wild outbursts unflinchingly reveal the raw survivalism, feral aggression, selfish depravity, and poisonous rage of a society abused by brute force and ruthless indifference and yielding to despair. "An Elephant Sitting Still," with its chilling sense of a suspended time in which history, culture, beauty, and even memory seem erased, is among the greatest recent films.

The director Khalik Allah's documentary "Black Mother" (April 4 and April 7) pursues a similarly grand idea in a briefer span. Allah, a New Yorker, films residents of Jamaica, his mother's home country—prostitutes and street people, merchants and members of the clergy (including the filmmaker's grandfather, a minister)—with a diverse and collage-like artistry. Mixing media (including 8-mm. and 16-mm. film and several video formats) and editing with a free hand, desynchronizing image and sound and using slow motion, Allah meshes personal experience and portraiture with myth and fantasy, religion and politics, to consider the exaltation and the degradation of women in Jamaican culture—and the very idea of black motherhood. In the movie's main thread, which follows one woman's pregnancy through to the birth of her child, Allah fuses cultural and scientific observations into a warily hopeful vision of endurance and progress.

—Richard Brody

COURTESY REDIANCE FILMS

OPENING

Gemini Reviewed this week in The Current Cinema. *Opening March 30. (In limited release.)* • **Love After Love** Russell Harbaugh directed this drama, which he co-wrote with Eric Mendelsohn, about two sons who, with their mother, are coping with the death of their father. Starring Chris O'Dowd, James Adomian, and Andie MacDowell. *Opening March 30. (In limited release.)* • **Ready Player One** Steven Spielberg directed this adaptation of Ernest Cline's science-fiction novel, about a teen-ager (Tye Sheridan) who goes on a hunt for a treasure hidden in a virtual-reality game. Co-starring Olivia Cooke and Ben Mendelsohn. *Opening March 29. (In wide release.)*

NOW PLAYING

Le Bonheur

The happiness alluded to in the title of Agnès Varda's 1965 drama of adultery in a working-class Paris suburb stings with whiplash irony. A handsome couple, François and Thérèse (played by the real-life couple Jean-Claude and Claire Drouot), and their two young children (the actors' own) live a life of old-fashioned sweetness. He's a cabinetmaker, she's a dressmaker; their sex life is active, and their social life is heartwarming. But François falls hard for a pert, uninhibited postal clerk (Marie-France Boyer), bringing drastic change to the domestic order. Varda fills her frames with riots of nature and color, like Bonnard paintings come to life, and with an erotic intimacy to match, choreographing physical passion with unabashed but formally controlled delight. She also brings abstract forces into view with tactile vigor, offering a sensual sociology of family and workplace rituals. Meanwhile, her witty visual allusions to films by her male New Wave contemporaries serve as both tributes and critiques. In French.—*Richard Brody (Museum of the Moving Image, March 31-April 1, and streaming.)*

Born in Flames

Lizzie Borden's fierce and trenchant political fantasy, from 1983, is set in New York ten years after a second American revolution, peaceful yet thorough, which has brought about democratic socialism and sparked new conflicts centered on race and gender. Two underground feminist radio stations are in competition—one led by Honey (played by the actress of the same name), a black woman who considers the revolution unfulfilled, and another by the white lesbian musician Isabelle (Adele Bertei), whose activism is cultural. Meanwhile, the vigilante Women's Army patrols the city by bicycle, a government employment program leads to riots, and three female journalists (one of whom is played by Kathryn Bigelow) report on divisions within the socialist movement. After an activist (Jean Satterfield) dies in police custody, the feminist theoretician Zella Wylie (played by the activist and writer Flo Kennedy) calls for direct action to get the message out in the only way that matters—on television. Borden's exhilarating, freely assembled story stages news reports, documentary sequences, and surveillance footage alongside tough action scenes and musical numbers; her violent vision is both ideologically complex and chilling.—*R.B. (IFC Center, March 30-31, and streaming.)*

Claire's Camera

The South Korean director Hong Sang-soo condenses a grand melodrama of work, love, and art into a brisk sixty-nine-minute roundelay of chance meetings and intimate confrontations. It's set amid—and was actually filmed at—the 2016 Cannes Film Festival, where a young Korean woman named Jeon Manhee (Kim Min-hee) is fired from her job as a film-sales assistant after a one-night stand with a director named So Wansoo (Jung Jin-young), who, unbeknownst to her, is the boyfriend of her boss, Nam Yanghye (Chang Mi-hee). Stuck in Cannes with nothing to do, Manhee befriends Claire (Isabelle Huppert), a teacher from Paris, who's there as a tourist. Claire wanders around with her Polaroid camera, taking pictures of everyone she meets—including Wansoo and Yanghye—and unintentionally sparking uncomfortable reunions. Hong distills vast emotional crises and creative self-recognitions into confessional monologues, pugnacious discussions, and luminous aphorisms. His tightrope-long takes of scenes filmed in settings ranging from the picturesque to the banal (restaurants and apartments, café terraces, Mediterranean beaches) have an intricate dramatic construction, replete with glittering asides and wondrous coincidences, to rival that of a Hollywood classic. In English and Korean.—*R.B. (In limited release.)*

The Death of Stalin

A scurrilous farce from Armando Iannucci, the creator of "Veep." It is set in 1953, at a pivotal point in the Soviet Union; Stalin (Adrian McLoughlin) dies at his dacha, outside Moscow, and an unseemly tussle to succeed him gets under way. The pretenders range from the cautious but ambitious Khrushchev (Steve Buscemi) to the feebly fumbling Malenkov (Jeffrey Tambor) to, most pitiless of all, Beria (Simon Russell Beale), the head of the N.K.V.D. The movie looks on with scorn as these three, plus the rest of Stalin's inner circle, who have walked for so long in the shadow of fear, jostle for power and try not to make the wrong move. The language is profane, the history inaccurate, and the tone never less than derisive; even the state funeral is an occasion for little more than muttered conspiracy and slapstick. No wonder Iannucci's film has been banned in Russia. Yet the comic outrage seems to fit the madness of the times that he describes, and Beale's Beria, in particular, crawls from the blackness of the humor as a creature of genuine evil. With Michael Palin, as Molotov, and Jason Isaacs, majestically thuggish, as Marshal Zhukov.—*Anthony Lane (Reviewed in our issue of 3/19/18.) (In limited release.)*

Isle of Dogs

The geographical restlessness of Wes Anderson is unabated. Having ventured to India for "The Darjeeling Limited" (2007) and to a vanished Mitteleuropa for "The Grand Budapest Hotel" (2014), he now turns his attention to Japan, and to the nonexistent city of Megasaki. Thanks to its despotic mayor, the canine population, laid low by sickness, is transported en masse to a garbage-filled island off the coast. One of the exiles used to belong to the mayor's young ward, who sets off to save his treasured pet; the rest of the dogs, meanwhile, plot their cunning rebellion and their return to a civilized life on the mainland. The movie is Anderson's first animated feature since "Fantastic Mr. Fox" (2009); once again, he works in stop-motion—his ideal medium, some will say, for it demands and rewards the taking of infinite pains. The movie's environmental theme feels like a new departure, but the overspill of gags, both visual and verbal, will be familiar to fans, as will the glow of famous names in the cast list. Those voicing the mutts include Bryan Cranston, Liev Schreiber, Scarlett Johansson, Jeff Goldblum, Tilda Swinton, and, of course, Bill Murray.—*A.L. (3/26/18) (In wide release.)*

Ismael's Ghosts

The director Arnaud Desplechin mines his earlier films and his cultural obsessions for a formidable trove of narrative complications, which he flings into the script with admirable abandon but without directorial audacity to match. His longtime alter ego, Mathieu Amalric, plays Ismael Vuillard, a fortysomething Paris-based director who's long been in mourning for his wife, Carlotta Bloom (Marion Cotillard), who vanished two decades ago. He is only now beginning a new relationship, with the astrophysicist Sylvia (Charlotte Gainsbourg), but, in a "Vertigo"-inspired twist, Carlotta suddenly shows up and wants to start over. There are also subplots involving Carlotta's father, Henri (László Szabó), a director who's a Jewish veteran of the French Resistance as well as Ismael's mentor, and Ismael's brother, Ivan (Louis Garrel), a diplomat, whom Ismael turns into the character of a spy in a new movie that he's struggling to finish. (Clips from the film-within-a-film are scattered throughout.) Desplechin's sense of style is merely illustrative—at its best, it's faux Truffaut. His storytelling engine is in overdrive, throwing off aphoristic sparks and melodramatic heat, but the film hardly gets moving until, finally, he meshes antic comedy, family passion, and mortal reckonings in a mad sprint to the finish line.—*R.B. (In limited release.)*

Love, Simon

Greg Berlanti, the talented guru behind a slew of superhero television shows, directs this coming-of-age story, about a closeted gay teen named Simon (empathetically played by Nick Robinson) who's being blackmailed by a schoolmate while nurturing a crush on an anonymous e-mail pen pal. The coming-out story differs from that of most gay-themed films: it has a light, glossy touch and is fizzy without being snarky. Simon's struggles to be himself with friends and family capture the fear and joy inherent in the process; Berlanti peppers the soundtrack with an upbeat playlist that recalls John Hughes's films, giving the romantic comedy a cozy veneer. The self-assured performances—by a cast that includes Jennifer Garner and Josh Duhamel, as Simon's parents, and Katherine Langford, as his best friend—plant the honeyed yet carefully considered high-school romance on firm emotional ground. Adapted by the screenwriters Elizabeth Berger and Isaac Aptaker from Becky Albertalli's novel "Simon vs. the Homo Sapiens Agenda."—*Bruce Diones (In wide release.)*

Personal Problems

This nearly three-hour melodrama, from 1980, directed by Bill Gunn and written by Ishmael Reed, is centered on one New York couple, Johnnie Mae Brown (Vertamae Grosvenor) and her husband, Charles (Walter Cotton), who live in a small but pleasant apartment in the West Forties, which they share uneasily with Charles's elderly father (Jim Wright), and, soon, with Johnnie Mae's stepbrother (Thommie Blackwell) and his wife (Andrea W. Hunt), who are fleeing legal trouble in California. Shooting in video on a tiny budget, Gunn captures a wide range of characters and conflicts in images of a frankly expressive analytical variety. He and Reed pursue a

far-reaching domesticity: the Browns, like their friends and family, are black, and the movie is deeply imbued with the forces of history and public policy, including the cultural heritage of the South, the fear of police brutality, and the menace of incarceration. Johnnie Mae, an emergency-room nurse at Harlem Hospital, confronts the violence of a poor and segregated neighborhood and brings her troubled thoughts home with her. The movie's panoramic cityscapes teem with the gritty details of emotional life: romance and chores, hope and despair and loss, bitter resentments and rowdy reckonings with mortality.—*R.B. (Metrograph.)*

Red Sparrow
An everyday tale of a Russian ballerina who becomes a secret agent, using sex as her weapon of choice. Why the film is not entitled "The Nutcracker" is beyond comprehension. In the course of the story, adapted by Justin Haythe from the novel by Jason Matthews, some characters are required to remove their clothes, but, by way of compensation, they get to put on nice thick Russian accents. The heroine is Dominika Egorova (Jennifer Lawrence), who quits the Bolshoi with a broken leg and, on the advice of her uncle Vanya (Matthias Schoenaerts), enters a secluded school, where a fearsome teacher (Charlotte Rampling) trains young men and women to seduce for the motherland. Dominika is let loose on an American, Nate Nash (Joel Edgerton), who, far from being unsuspecting, sees exactly what game she is playing and sets about recruiting her as a spy for the C.I.A. The plot, though thorny, conceals few surprises, and Dominika, beautiful yet often blank, remains a cipher without quite deepening into an enigma. The director is Francis Lawrence, who seems curiously eager to crank up the physical unpleasantness, perhaps in the hope that we will mistake it for thrills. With Jeremy Irons.—*A.L. (3/12/18) (In wide release.)*

Roxanne Roxanne
This tough-minded, pain-streaked bio-pic about Lolita Shanté Gooden—who, as Roxanne Shanté, became a leading rapper, in 1984, at the age of fourteen—is anchored by Chanté Adams's fierce yet wrenchingly vulnerable lead performance. The writer and director Michael Larnell's dramatization of Shanté's story is centered in her Queensbridge neighborhood, where, as a schoolgirl, she was already celebrated as the local rap champion. Her home life is shaken when her mother, Peggy (Nia Long), a hardworking disciplinarian, is bilked out of a down payment on a new home by her boyfriend (Curtiss Cook) and starts drinking. Meanwhile, a neighbor and d.j. (Kevin Phillips) records Shanté for fun and makes her famous overnight. Her career takes off, but she never sees the money; at the same time, Shanté gets involved with Cross (Mahershala Ali), a suave middle-aged drug dealer who treats her romantically—and then violently. Larnell gathers a wide cast of vital actors for a bustling series of incidents that veer quickly from the sentimental to the shattering. Though the movie offers little societal context, it resounds with revelations of brutal realms run by ruthless men and shows why Shanté, like many women in show business, left her career too early.—*R.B. (In limited release and on Netflix.)*

3:10 to Yuma
The simple and beautiful opening sequence—a stagecoach following the wheel ruts of a one-track route—crystallizes the melancholy Arizona frontier of this 1957 Western. As the director, Delmer Daves, moves in for his closeups, the stagecoach runs headlong into the notorious outlaw Ben Wade (Glenn Ford) and his men, who commit robbery and murder in front of the rancher Dan Evans (Van Heflin) and his two sons. Evans hesitates to play the hero, but, when Wade is captured, the stage-line owner offers a reward to any man who will bring him to the nearest railroad stop and load him onto the Yuma train, and Evans steps up. Daves narrows the focus to these deadly companions, locked in a hotel room as Evans waits for the train and Wade waits for the rest of his gang to save him. The compositions evoke a kind of open-air claustrophobia, whether in overhead shots that pin the characters in the landscape or in tableaux of men, women, and children staving off the chaos of the wide-open spaces with their weary fences and weathered towns. Based on a story by Elmore Leonard.—*Michael Sragow (MOMA, March 29, and streaming.)*

Tomb Raider
Yet another chapter in the exploits of Lara Croft, who must be running out of tombs to raid. In two earlier films, she was played by Angelina Jolie, but the role now passes to Alicia Vikander, who, though equally allergic to fear, seems more grounded and less fantastical. Her task, in the new movie, is first to show that she can ride a bicycle around London at considerable speed, and then to trace the movements of her father (Dominic West). He disappeared seven years ago, as he sought the final resting place of Himiko, a legendary Japanese queen. The mission takes Lara to Hong Kong, where she embarks across a thunderous sea with a drunken sailor (Daniel Wu) in search of an unfindable island. This she finds. Already in residence is Vogel (Walton Goggins), wicked but highly unfrightening, who, like the Crofts, has his eye on the buried prize, the hunt for which consumes the last—and the least engaging—phase of the story. For most of the film, the director, Roar Uthaug, makes brisk attempts to refresh the weary tropes of the saga, but the climactic challenge is almost indistinguishable from a video game. With Kristin Scott Thomas.—*A.L. (3/26/18) (In wide release.)*

A Wrinkle in Time
Ava DuVernay's direction of this adaptation of Madeleine L'Engle's classic novel captures the original work's sense of exhilaration and wonder, but the script (by Jennifer Lee and Jeff Stockwell) eliminates the book's most idiosyncratic aspects and intricate world-building. Storm Reid stars as Meg Murry, a tween who, with her little brother, Charles Wallace (Deric McCabe), and her friend Calvin (Levi Miller), goes on an intergalactic adventure in search of her father (Chris Pine), a scientist who has been missing for four years. Guided by three women with superpowers—Mrs. Whatsit (Reese Witherspoon), Mrs. Who (Mindy Kaling), and Mrs. Which (Oprah Winfrey)—the children face exotic creatures in strange new places and challenge colossal forces of evil. Above all, Meg learns to confront—and to derive strength from—her stifled pain. DuVernay highlights Reid's steadfast and masklike performance in intense closeups and realizes elements of fantasy with verve, purpose, and some giddily psychedelic imagery. Nonetheless, the story's emotional moments and delightful details only vaguely cohere. With Gugu Mbatha-Raw, as Meg and Charles Wallace's mother, also a scientist.—*R.B. (In wide release.)*

NIGHT LIFE

ROCK AND POP

Musicians and night-club proprietors lead complicated lives; it's advisable to check in advance to confirm engagements.

Ashanti and Ja Rule
Local radio stations have been promoting this reunion concert for weeks, with good reason. As the marquee artists of the music executive Irv Gotti's Murder Inc. Records, Ashanti and Ja Rule released dozens of smash singles and collaborations at the turn of the century, changing the everyday sound of pop and urban radio in their wake. Their pairing was an exercise in inversion: Rule was willing to bend his gruff voice into big melodies, and Ashanti's everywoman themes offset her vocal glamour. The formula worked time and again; fifteen years later, their run of hits has settled into quasi-classic status, providing the shout-along section of wedding playlists across the country. This homecoming show promises to be as much of a family gathering. *(Kings Theatre, 1027 Flatbush Ave., Brooklyn. kingstheatre.com. March 30.)*

DJ Manny and Boylan
Teklife is a d.j.-and-producer collective that has carried the Chicago footwork subgenre beyond the city's borders. The scene is an extension of Chicago's formative house music of the nineteen-eighties: breakneck soul loops and speeding drums make up the footwork sound, designed to coincide with quick, technical dance steps. Teklife was founded in the skating rinks of Chicago in the early aughts by DJ Rashad and DJ Spinn, and the group has since gained members across the globe, self-releasing EPs, videos, and merchandise while touring. When DJ Rashad passed away, in 2014, the crew's ambitions to make their local sound universally known took on new resonance. Two Teklife mainstays, DJ Manny, a protégé of Rashad's, and Boylan, making his New York début, man the sound system at H0l0, an under-the-radar venue in Ridgewood. *(1090 Wyckoff Ave., Queens. h0l0.nyc. March 30.)*

Hanni El Khatib
This scuz-punk singer writes songs that KEXP dreams are made of. While serving as a creative director for the apparel line HUF, the San Francisco skateboarder began noodling with recording, producing a few demos that were received strongly enough to land a modest label deal. His profile rose with some well-conceived covers, including "You Rascal You" and "I Got a Thing," and his bluesy art-rock sound—part Jack White, part Ezra Koenig—was seized upon by filmmakers and advertisers. Last year, El Khatib released a double album, "Savage Times"; throughout the record, the son of a Palestinian father and a Filipino mother takes aim at the world around him, exploring new political and biographical themes. *(Rough Trade, 64 N. 9th St., Brooklyn. roughtradenyc.com. March 30.)*

Albert Hammond, Jr.
The Strokes, and the era of shaggy Big Apple rock they sparked at the dawn of the aughts, have phased into nostalgia fodder, the subject of oral histories and podcast roundtables. But Hammond, Jr., who served as the band's guitarist, has resolved to keep contributing to history rather than become it. Since surviving the band's well-documented struggles with substance abuse, he has released a handful of solo albums that retain the signature pep and freewheeling edge of the Strokes' most beloved material. "Whether we're just fucking around or feeling it out . . . it's just a moment away," he sings on "Far Away Truths," from his most recent album, "Francis Trouble"—the record is a low-stakes look at what could have been, and what still is. *(Brooklyn Steel, 319 Frost St., Williamsburg. 888-929-7849. March 28.)*

Krimewatch
Dig up this New York band's small releases, and the first thing you'll notice is the hand-drawn, shadowy gumshoe that stalks its album art and tour merchandise. Krimewatch favors the darker corners of the city's hardcore history; the band members settled on their name not only as an excuse to use the neighborhood-watch image but also as a nod to the nineteen-eighties hardcore band Krakdown. Rhylli, on vocal duty, fires off couplets in Japanese and English, and has a searing live presence—onstage, she quickly becomes a dizzying tangle of limbs, hair, and earrings, tethered only by a microphone cord. The band supports the **Flex,** who visit from the U.K. to host a rip-fest in East Williamsburg's industrial outskirts. *(Sunnyvale, 1031 Grand St., Brooklyn. 347-987-3971. March 30.)*

Laraaji
In a world of meditation, yoga, and veganism, New Age music occupies an odd slot, at once ubiquitous and invisible. Laraaji, born Edward Larry Gordon, in Philadelphia, was discovered by Brian Eno while playing in Washington Square Park, and was soon releasing spacious, trancelike compositions with the storied producer, contributing to Eno's "Ambient 3: Day of Radiance," in 1980. His music sat on shelves, largely unnoticed by the buying public, for the next two decades. But these days Laraaji is enjoying a bit of a cult resurgence, playing sets for the influential Boiler Room party series and gaining new fans through well-curated reissues on respected labels like Stones Throw and Warp. On the heels of a new reissue, "Vision Songs, Vol. 1," which arrived in January, Laraaji stages an intimate live performance at National Sawdust. *(80 N. 6th St., Brooklyn. 646-779-8455. March 30.)*

MIKE
This clear-eyed young rapper from the Bronx (by way of London) is a breath of fresh air in a humid room. He has been self-releasing dense lo-fi rap since 2015, littered with gooey production and deeply personal anecdotes about

school, work, family, and everyday life. Last year, MIKE delivered the album "May God Bless Your Hustle," something of a late-adolescence thesis statement presented via internal rhyme, its name inspired by the words of advice and encouragement his mother would offer him over the phone. MIKE counts brainy peers like Earl Sweatshirt and Wiki as fans, as well as a contingent of city kids who identify with his slow approach to fast surroundings. He opens for the chameleonic D.I.Y. songwriter **Amen Dunes.** *(Music Hall of Williamsburg, 66 N. 6th St., Brooklyn. 718-486-5400. March 31.)*

Justin Strauss
Strauss signed to Chris Blackwell's prolific Island Records in the mid-seventies at just seventeen, as a member of the pop band Milk 'N' Cookies. Since then, he's jockeyed through four decades of the city's dance halls, from the Mudd Club to the Tunnel and Life, while earning more than two hundred production credits and collaborating with artists like the B-52s, Luther Vandross, and Sergio Mendez—all fair game for the night's set. Strauss co-headlines at Output with the dance-punk outfit **Chk Chk Chk.** *(74 Wythe Ave., Brooklyn. outputclub.com. March 29.)*

JAZZ AND STANDARDS

George Colligan
If Colligan's name doesn't ring a bell, his face and incisive playing may: the resourceful pianist has been working behind Cassandra Wilson, Ravi Coltrane, and any number of central jazz figures for the past three decades. Leading a trio here, he calls on the drummer **Lenny White** and one of his renowned former employers, the bassist **Buster Williams.** *(Smoke, 2751 Broadway, between 105th and 106th Sts. 212-864-6662. March 29.)*

The DIVA Jazz Orchestra's 25th Anniversary Celebration
All-female big bands are nothing new—the International Sweethearts of Rhythm were swinging for all they were worth back in the forties—but they've been few and far between. DIVA, under the intrepid direction of the drummer Sherrie Maricle, has nurtured outstanding women jazz musicians for a quarter century now, proving that novelty has nothing to do with this crack ensemble's success. The band couldn't have picked a better social moment to celebrate its longevity. *(Dizzy's Club Coca-Cola, Broadway at 60th St. 212-258-9595. March 28-April 1.)*

Michael Feinstein
Feinstein is going to have to walk a very fine line as he celebrates the sexist, boozing, and crass-as-they-wanted-to-be kings of the Rat Pack: Frank Sinatra, Dean Martin, and Sammy Davis, Jr. It's fortunate that each was a masterly singer who embraced some of the most durable standards still heard today. Feinstein will be supported by the **Tedd Firth Big Band** and joined by guest singers including **Clint Holmes.** *(Appel Room, Jazz at Lincoln Center, Broadway at 60th St. 212-721-6500. March 28-29.)*

Scott Wendholt and Adam Kolker
A snarling bass-and-drum team is all this lean and feisty foursome needs to offset the authority of its front-line horns, the trumpeter Wendholt and the saxophonist Kolker. The joined-at-the-hip rhythm section of **Victor Lewis,** on drums, and **Ugonna Okegwo,** on bass, provides the horsepower. *(Smalls, 183 W. 10th St. 212-252-5091. March 30-31.)*

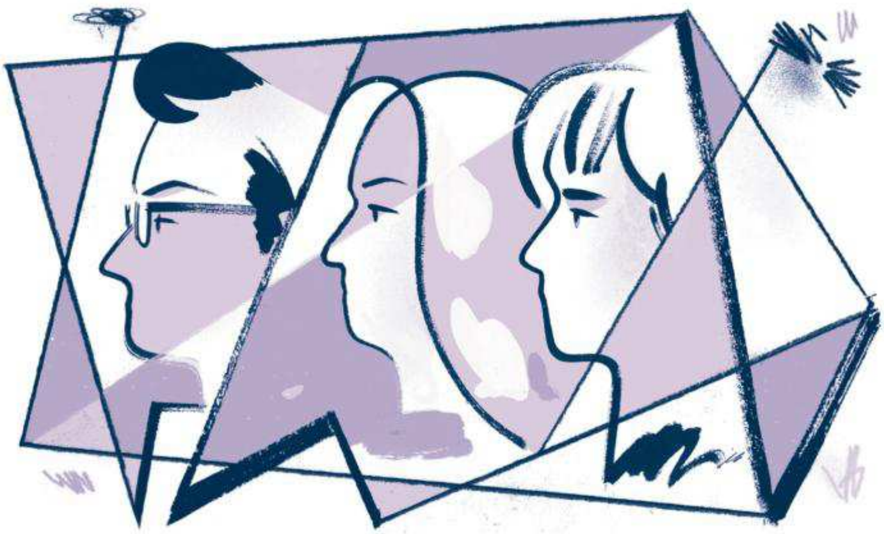
Martin Wind
His fingers racing effortlessly over the strings of his bass, Wind has displayed his remarkable chops with the many prominent mainstream jazz artists who have been lucky enough to snag him for a gig or recording. Wind's new album, "Light Blue," features his own compositions and some of the musicians who will be heard alongside him here, including **Anat Cohen,** on clarinet; **Ingrid Jensen,** on trumpet; and **Scott Robinson,** on saxophone. *(Jazz at Kitano, 66 Park Ave., at 38th St. 212-885-7119. March 30-31.)*



ILLUSTRATION BY ALLISON FILICE

An under-heralded forefather of both ambient and New Age music, Laraaji reëmerged this year with "Vision Songs, Vol. 1," a collection of tracks originally self-released, on cassette tapes, in 1984.

CLASSICAL MUSIC



Music by Dmitri Kourliandski, Marina Khorkova, and Alexander Khubeev, at National Sawdust.

Rites of Spring

A new crop of talented young composers emerges from Russia.

In the last years of the Soviet Union, the music of three Russian composers—Alfred Schnittke, Edison Denisov, and Sofia Gubaidulina—occupied the world's concert stages with the same prestige and regularity as that of their great predecessors, Shostakovich and Prokofiev. Now only Gubaidulina is left as a major figure, and many music-minded Americans may have thought that, in Russia, new music, along with democracy, was becoming a lost cause.

But this is not the truth, as musicians from the New York Philharmonic will prove on April 2, when the orchestra presents the last of its "Contact!" concerts—a contemporary-music series begun by the orchestra's former music director, Alan Gilbert—at Williamsburg's National Sawdust. (New-music activities will remain vibrant under the incoming music director, Jaap van Zweden.) Hosting the event is the popular composer and conductor Esa-Pekka Salonen, with Gerard McBurney, an acknowledged authority on Russian and Soviet music and culture, consulting on the program.

Listeners will be impressed by the talent of the Philharmonic's chosen group of composers, which includes Denis Khorov, Marina Khorkova, Alexander Khubeev, Dmitri Kourliandski, and Nikolay Popov. They might be surprised, though, at how deeply most of these musicians have buried what Westerners may think of as the national style of Romanticism, which goes back to Glinka and Tchaikovsky. Russia's young composers, it seems, are busily adapting to their own ends the extreme-sounds techniques of such contemporary masters as Helmut Lachenmann, much like their coevals in New York and Western Europe.

A soulful sort of Russian darkness, however, remains. (Khorov's "Barcarolle" hints just a little at Rachmaninoff.) For sheer ambition, the most impressive piece will likely be Khubeev's "Ghost of Dystopia," a mini-symphony of instrumental squeaks, groans, and body slams initiated by a conductor whose pants, shirt, and gloves will be attached to a series of sound-producing plastic boxes. More subtle is Popov's "Nibiru 20/13," a work of musical science-fiction, in which video elements complement a cunningly crafted hodgepodge of both electronica and string-quartet gestures, making for a vision of Armageddon that's almost whimsical in tone.

—*Russell Platt*

ILLUSTRATION BY ROMAN MURADOV

CLASSICAL MUSIC

OPERA

Metropolitan Opera
Visually enchanting yet musically thin, Phelim McDermott's new production of **"Così Fan Tutte"** sets the opera in a carnival-like milieu that evokes Coney Island in the nineteen-fifties, complete with sword swallowers and bearded ladies; he replaces the complicated sexual politics embedded in Mozart and Da Ponte's masterpiece with a mood of cheery and winsome nostalgia. Christopher Maltman, a well-travelled baritone, is a finely sinister Don Alfonso, and Kelli O'Hara, the magnetic Broadway star who takes the role of Despina, makes up what she lacks in vocal color with abundant comic charm. Among the artists who portray the quartet of young lovers, Serena Malfi, who brings singing of sustained power and seamless elegance to the part of Dorabella, stands out best; David Robertson conducts. *March 31 at 1.* • At seventy-seven, Plácido Domingo continues to defy conventional wisdom and seemingly time itself as he takes on another Verdi baritone role—his eleventh in nine years—in this season's revival of **"Luisa Miller,"** a bucolic tragedy based on Schiller's play "Love and Intrigue." The Met flanks him with two superlative artists—Sonya Yoncheva and Piotr Beczala—in the lead roles; Bertrand de Billy. *March 29 and April 2 at 7:30.* • **Also playing:** Franco Zeffirelli's crowd-pleasing production of Puccini's **"Turandot"** is back, with a cast that includes Martina Serafin, Marcelo Álvarez, Guanqun Yu, and Alexander Tsymbalyuk; Marco Armiliato. *March 28 at 7:30 and March 31 at 8:30.* • A revival of Mary Zimmerman's staging of Donizetti's **"Lucia di Lammermoor"** features the skillful coloratura soprano Olga Peretyatko-Mariotti, as Lucia, and Vittorio Grigolo, as the volatile lover who drives her to insanity; Roberto Abbado. *March 30 at 8 and April 3 at 7:30. (Metropolitan Opera House. 212-362-6000.)*

Bavarian State Opera: "Der Rosenkavalier"
The lyrical and orchestrational opulence of Richard Strauss's fifth opera lends itself well to a concert setting. Kirill Petrenko leads the forces of Munich's distinguished resident company and a cast that includes Adrianne Pieczonka, Angela Brower, Hanna-Elisabeth Müller, Peter Rose, and Lawrence Brownlee. *March 29 at 7. (Carnegie Hall. 212-247-7800.)*

ORCHESTRAS AND CHORUSES

Bavarian State Orchestra
Not to be confused with the renowned Bavarian Radio Orchestra, this ensemble, which is the orchestra of the equally lofty Bavarian State Opera, comes to Carnegie Hall under the command of Kirill Petrenko, who will become chief conductor of the Berlin Philharmonic next year. Their program offers two chunks of rich Romantic repertory: the Brahms Double Concerto (with the violinist Julia Fischer and the cellist Daniel Müller-Schott) and Tchaikovsky's "Manfred" Symphony. *March 28 at 8. (212-247-7800.)*

Juilliard Orchestra
David Robertson, ably conducting "Così Fan Tutte" at the Met, leads the Juilliard School's flagship ensemble in three works, two of which are by European composers but all of which were written in America. Ives's "Three Places in New England" and Bartók's Third Piano Concerto (with Tomer Gewirtzman) are followed by a beloved New York staple, Dvořák's "New World" Symphony. *April 2 at 8. (Carnegie Hall. 212-247-7800.)*

RECITALS

Christian Tetzlaff
The violinist, a musician of keen insight and full technical command, has spent his life with the music of Bach. This week, he brings his interpretations of four of the Solo Sonatas and Partitas to Alice Tully Hall. *March 28 at 7:30. (212-721-6500.)*

String Orchestra of Brooklyn: "String Theories"
This community-minded ensemble mounts its annual "String Theories" concert series, devoted to twenty-first-century repertoire. Opening night showcases the scintillating violin duo String Noise and Greg Saunier, the drummer for the art-rock band Deerhoof, in ferocious, punk-infused music by Eric Lyon. Subsequent events feature compositions by members of the polystylistic string quartet the Rhythm Method, and a mix of meditative pieces by John Cage, Pauline Oliveros, Tony Conrad, and Zach Layton. *March 28-30 at 8. (Roulette, 509 Atlantic Ave., Brooklyn. roulette.org.)*

"Composer Portrait": Christopher Cerrone
Cerrone, whose spare, sometimes haunting pieces have won him a fair degree of millennial renown, is the subject of the latest of Miller Theatre's portrait concerts. Third Coast Percussion and the mezzo-soprano Rachel Calloway are on hand to deliver a world première ("A Natural History of Vacant Lots") and two other works from the past decade. *March 29 at 8. (Columbia University, Broadway at 116th St. 212-854-7799.)*

András Schiff
The magnificent pianist is known not only for his capacious programs but for his moral courage, having spoken out forcefully against the political direction of his native Hungary. His program revels in the German classics: works by Mendelssohn, Beethoven (the Sonata No. 24 in F-Sharp Major), Brahms (the Piano Pieces, Op. 76, and the Fantasies, Op. 116), and Bach. *April 3 at 8. (Carnegie Hall. 212-247-7800.)*

ABOVE & BEYOND



ILLUSTRATION BY PABLO AMARGO

Easter Parade and Bonnet Festival
Held annually in New York City, this Easter gathering has long symbolized the holiday's blend of theology, pageantry, and whimsy. In the mid-nineteenth century, St. Patrick's Cathedral began displaying floral arrangements at its Easter services, and high-society female parishioners followed suit, brightening their church apparel accordingly; soon, the stroll from the cathedral down Fifth Avenue became a flamboyant showcase of bonnets, ribbons, and floral prints. This Easter morning, participants will march in headwear featuring elaborate models of the skyline, live animals, and countless other outlandish ornaments, in keeping with the parade's spirit of one-upmanship. As the poet Rosyrie Schulman declared in this magazine, in 1946, "This year I'm being different / (My heart is set upon it) / I'm going to wear a ribbon / With a touch of bonnet on it." *(49th St. at Fifth Ave., marching up to 57th St. April 1 at 10 A.M.)*

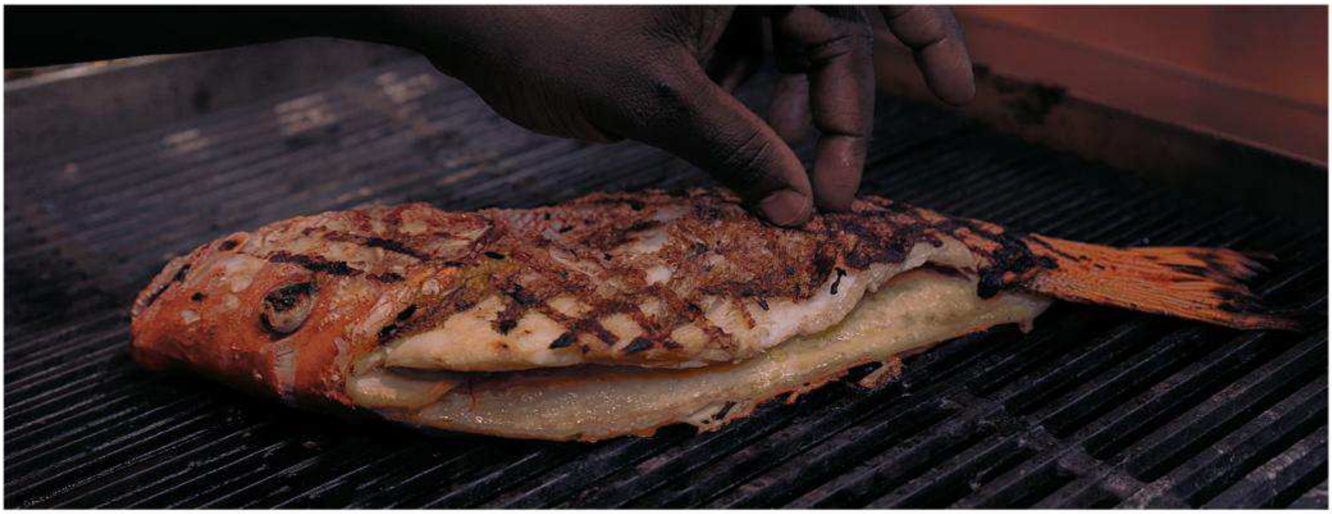
AUCTIONS AND ANTIQUES

The sale of American art at **Sotheby's** on March 28 features a sampler of paintings that emphasizes stylistic diversity—and optimistic similarity. Genteel scenes like Childe Hassam's "Old Mulford House, East Hampton" are offered alongside Romantic Western views like Albert Bierstadt's "Mountain Landscape" and folk compositions, such as Grandma Moses's joyful "Hurrah for Christmas." *(York Ave. at 72nd St. 212-606-7000.)* • "Is the sun the essence of blackness? Or is blackness the essence of the sun?" Malcolm X asks in a 1950 letter, now included in **Swann's** March 29 auction of printed and manuscript African-Americana. (Malcolm X had recently embraced Islam and was still puzzling out his new identity.) It goes under the gavel along with other items documenting black life in America, including a letter from a Georgia slave to his mother, held at another plantation, and the papers of an eighteenth-century Pennsylvania abolitionist, David Redick. *(104 E. 25th St. 212-254-4710.)*

READINGS AND TALKS

Brooklyn Public Library
Cecile Richards, the daughter of the former Texas governor Ann Richards, served as the president of the Planned Parenthood Federation of America for more than a decade, before stepping down in January. In a new memoir, "Make Trouble," she outlines a life devoted to activism and the ongoing march toward gender equality. She will discuss her experience on the front lines of the fight for women's rights at this talk and book signing. *(10 Grand Army Plaza, Brooklyn. April 3 at 7:30.)*

FOOD & DRINK



PHOTOGRAPH BY WILL WARASILA FOR THE NEW YORKER; ILLUSTRATION BY JOOST SWARTE

TABLES FOR TWO

Simon & the Whale

23 Lexington Ave. (212-475-1924)

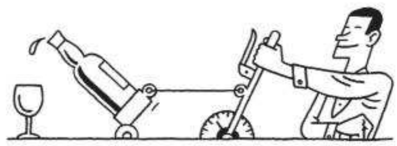
Gabriel Stulman, who has opened some of the city's most beloved restaurants—the Little Owl, Joseph Leonard, Fedora—named his latest, Simon & the Whale, after his young son, who is passionate about those awe-inspiring creatures of the deep. If there's a thematic connection to draw, it's that at night the dining room, in the swanky new Freehand Hotel, is as dark and exciting as an aquarium, with romantic lighting just barely illuminating the dramatic Arts and Crafts-inspired décor by the design firm Roman & Williams, heavy on custom woodwork, oceanic-blue tiles, and warm metals. It has the glow—and the early buzz—of a place to be, and people lucky enough to have won tables scan each other's faces searchingly, as if to say, "Are *you* somebody?"

The menu offers dishes that sound delicious and cleverly unusual in the way that the current moment demands—pork collar Milanese with apricot mostarda; apple confit with parsnip sponge cake and sunchoke cream—and many that center on seafood. On a recent evening, I watched, mouth agape, as a nearby table was presented with what looked like a pot of desiccated calla lilies. It was fish chicharrón, a server explained, giant sheaths of sea-bass skin deep fried until crackly, then coated in salt, pepper, and dehydrated malt vinegar. It is not currently on the menu, but this party had put in a special request, and she'd see if there was any left over. There was; the bouquet, in a ceramic vase, was as striking as a sculpture and remarkably satisfying, like salt-and-vinegar potato chips plucked from the sea.

Otherwise, though, I felt a bit like a child who had misgauged her wrapped Christmas presents. My hopes for the Milanese—that the collar of a pig would prove as tender as that of a fish—were dashed by a too-thick, gristly piece of meat in an appealing-looking but undersalted shell of bread crumbs. The beautiful whole fish for two was overwhelmed by its accessories—couscous, almonds, Brussels sprouts, charred carrots, *and* mandarin-orange segments—and priced at an inexplicable eighty dollars. A few things were wonderful, including the black-bass crudo, with its perfect little packages of raw fish, coconut milk, and sheets of crispy rice topped with togarashi. I'd eat the crusty roasted-barley black bread—which has all the nutty, caramelized appeal of burnt toast without the bitterness, and a delightful hint of anise—every day. But the accompanying taramasalata, a classic Greek dip made with fish roe, was remarkably bland, and seemed, like too many things at Simon & the Whale, chosen primarily for its visual effect: it's millennial pink. *(Entrées $18-$80.)*

—Hannah Goldfield

BAR TAB



Lovers Rock

419 Tompkins Ave., Brooklyn (347-915-0325)

Every weekend from the first whispers of warmth in spring to the last mild day in fall, the patio of this Bed-Stuy cocktail spot, named after a romantic subgenre of reggae, is a sprawl of naked limbs. Inside, crowded bodies about as diverse as the neighborhood itself squeeze past one another in the little dance space between the back door and the bar, half of them angling for someone new to match their rhythm, the other half trying not to spill their glasses of rum or mezcal on their way to fresh air. The mood is decidedly more subdued in late winter, but, a few weeks ago, a man wearing a black turban and a necklace of wooden beads went in search of a light and found a tall blond woman lounging on a bench outside. She was nursing a Painkiller—a fruity rum cocktail served with a wedge of pineapple. "I used to drink these like water when I lived in the Caribbean," she said. "It's a holiday in your mouth." A few nights later, the d.j. stared concernedly at her laptop and started playing a reggae version of "I Wanna Sex You Up," as a young patron with an overstuffed leopard-print tote chatted with her friends. One of them, a Ghanaian man, remarked, "The playlist is amazing." "I know," she replied. "I'm Shazaming it!" She sipped her drink and recalled, "My roommate made out with a Rastafarian guy here. He was, like, 'Love is all you need, you're beautiful, you have a beautiful soul'—that kind of shit. He was a fucking asshole." Her spirits brightened a moment later. "SZA," she said, gesturing into the air as the song changed. "I love this."*—Neima Jahromi*


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THE TALK OF THE TOWN

COMMENT
ACCOUNT SETTINGS

When it comes to the phenomenon of Donald Trump, you have to give him this: sanctimony is not foremost among his sins. He provokes no moral disappointment, because he creates no moral expectations. Just as his business career was characterized by Mob-connected cronies, racial bias, aggrieved contractors, dubious partners, byzantine lawsuits, and tabloid sensation, his Presidency dispenses with ethical pretense. Human rights in foreign affairs, compassion for the disadvantaged in domestic affairs, and truth in public statements are objects only of disdain.

Recent days have been typical. The President spoke on the telephone with Vladimir Putin about his reëlection last Tuesday, and, despite the counsel of his national-security advisers ("DO NOT CONGRATULATE," they wrote, noting the current tension in relations), he conveyed his kudos anyway. No mention was made of the evidence of cyber-meddling in the 2016 campaign or of the use on British soil of chemical weapons to poison enemies of the Kremlin. At the same time, the President faced an array of sordid accusations, in court and in the press—from a former Playmate and from a former pornographic-film actress, both of whom sought release from the contracts that had silenced them; and from a former contestant on "The Apprentice," his reality-television show, who had spoken of being sexually harassed by Trump, and was now suing him for defamation. He also took the time to hire a conspiracy-minded attorney named Joseph diGenova, whose dark utterances on Fox News have heightened fears that Trump might yet fire Robert Mueller, the special counsel, and spark a constitutional crisis. Finally, on Thursday Trump sent the financial markets plunging with his threats of a trade war and finished the day by firing his national-security adviser, Lieutenant General H. R. McMaster, and replacing him with the most incendiary choice imaginable—John Bolton, the U.N. Ambassador under George W. Bush. And one other thing: John Dowd, one of the President's lawyers in the Russia inquiry, quit because his client insisted on a more aggressive legal strategy. "I love the President," Dowd said, betraying no irony to the *Times*. "I wish him the best of luck. I think he has a really good case."

In the current Administration, it was just another week. Trump, whose most prominent character trait is shamelessness, suffers little damage among his core supporters for his daily trespasses. As a candidate, Trump spoke the startling truth when he declared, "I could stand in the middle of Fifth Avenue and shoot somebody and I wouldn't lose any voters, O.K.? It's, like, incredible." Yes, it is.



The most significant Trump-adjacent scandal of the week, the one involving Cambridge Analytica, a data-mining organization financed by the conservative Mercer family, has indeed forced a moral reckoning. But it is not a reckoning in Washington; it is centered, instead, in Menlo Park, California.

From the early days of Silicon Valley's Internet-era revolution, as engineers, designers, and financiers began to recognize the potential of their inventions, sanctimony was a distinct feature of the revolutionists. The young innovators of Silicon Valley were not like the largely amoral barons of industry and finance. They were visionaries of virtue. Google adopted the slogan "Don't Be Evil" (which morphed into "Do the Right Thing"). These young innovators were creating a seamlessly "connected" world; they were empowering the dispossessed with their tools and platforms. If you expressed any doubts about the inherent goodness of technology, you didn't "get it." And to fail to get it was to be gloomy, a Luddite, and three-quarters dead.

The era of sanctimony has, in the past few years, given way to a dawning skepticism. Even as Alphabet, Amazon, Apple, and Facebook continue to reap immense riches, they have faced questions that could not be answered with flippant declarations of rectitude: Is Google the Standard Oil of search engines, a monopoly best broken up? Does Apple, which has a valuation nearly three times greater

ILLUSTRATIONS BY TOM BACHTELL

than ExxonMobil's, exploit factory workers in China? Why is Facebook—"the biggest surveillance-based enterprise in the history of mankind," in the memorable phrase of the critic and novelist John Lanchester—allowed to exploit the work of "content creators" while doing so little to reward them financially? Does the company care that its algorithms have helped create an informational ecosystem that, with its feeds and filter bubbles, has done much to intensify raw partisanship? What does Silicon Valley intend to do about the disparities of race and gender in its ranks? What is the cost of our obsession with the digital devices in our palms—the cost in attention, civility, and moment-to-moment consciousness? The triumphs and wonders of the Internet age have been obvious; the answers to such questions less so.

Careful reporting by the *Times*, and by the *Observer*, in the U.K., has now revealed how Cambridge Analytica "scraped" information from as many as fifty million unwitting Facebook users in order to help the Trump campaign. This was a scam with global intent. "They want to fight a culture war in America," Christopher Wylie, one of the founders of Cambridge Analytica, told the *Times*. "Cambridge Analytica was supposed to be the arsenal of weapons to fight that culture war." (Wylie left the firm in 2014 and is now regarded as the main whistle-blower against it.) Just as congratulating autocrats on their election victories is nothing new, Cambridge Analytica did not invent data harvesting for political gain. But, as the news reports make plain, it got hold of the data in particularly deceptive ways. The entire operation is now said to be under scrutiny by Robert Mueller's investigators.

The question is whether the barons of Silicon Valley can move beyond ritual statements of regret and assurance to a genuine self-accounting. In November, 2016, when Facebook was first presented with evidence that its platform had been exploited by Russian hackers to Trump's advantage, Mark Zuckerberg, serene and arrogant, dismissed the suggestion as "pretty crazy." As Nicholas Thompson and Fred Vogelstein write, in *Wired*, it took Zuckerberg at least a year to fully acknowledge Facebook's role in the election drama and take action.

Debate over what to do about Cambridge Analytica's exploitation of Facebook was also intense; its lawyers and its P.R. team have argued for minimal transparency. Sandy Parakilas, a former operations manager on the platform team at Facebook, is among those who say that Zuckerberg ought to testify before Congress and accept external oversight mechanisms to prevent such exploitation. Zuckerberg, in his first public statement since the Cambridge Analytica scandal broke, apologized and promised to further restrict access to users' data, and to make it easier for users to learn which apps have access to their information, allowing, "There's more to do, and we need to step up and do it."

What we've learned from the scandals that have beset Silicon Valley of late is what we learned from the scandals that beset the Catholic Church: a self-protective assumption of righteousness can make it harder to acknowledge and confront patterns of abuse. With great power comes great responsibility. Except, as the current tenant of 1600 Pennsylvania Avenue reminds us, when it doesn't.

—*David Remnick*

STRENGTH IN NUMBERS
PREDATOR APP



In a week in which Stormy Daniels could plausibly be called the most famous actress in America, and with the nation awaiting revelations about the private predilections of the serial sexual harasser in the White House, it seemed grimly appropriate that, on a recent evening, a group of theatre professionals in New York would gather to discuss ways that their own industry might combat more routine manifestations of sexual transgression.

Julia Jordan, the treasurer of the Dramatists Guild and the executive director of the Lilly Awards, welcomed a full house at the A.R.T./New York Theatres, on West Fifty-third Street, by heralding "a tool to remove serial predators from our workplaces." The assembled performers, writers, and other creative types were there to learn about Callisto, an online nonprofit startup that seeks to leverage the power of tech to fight sexual harassment and assault. Using Callisto, a victim can create a secure, time-stamped record of her assault, a so-called "information escrow." Should another victim report the same assailant, a Callisto operative will then discreetly offer to connect the victims with each other, so that, with strength in numbers, they can decide how to proceed, whether by confronting their attacker, making a report to the police, or contacting the press. Callisto aims to function something like the "Shitty Media Men" list, but without the transparency and the vulnerability of a Google doc. The service launched two years ago, and has been adopted by thirteen colleges across the country, among them Stanford, Pomona, and U.S.C. The purpose of the New York meeting was to discuss ways in which the theatre business might become the first noncollegiate industry to adopt the tool as a way of keeping tabs on predators.

The playwright Sarah Ruhl was a supporter; although she could not be at the gathering, she sent what she termed "a message to our brothers in the workplace," which was read aloud by Florencia Lozano, an actress and a founding member of the LAByrinth Theatre. "If men are wearing a scarlet 'H' for harassment right now, and feeling public shame, know that women have been wearing scarlet 'A's since time immemorial," Lozano read. Eve Ensler, the author of "The Vagina Monologues," also sent word, via Winter Miller, a playwright, who read aloud, "It is critical the theatre world takes these steps so that we move from policing patriarchy to dismantling it." Miller also had a message from Gloria Steinem: "It still takes more than one woman accusing the same man of the same criminal behavior."

The C.E.O. and founder of Callisto, Jess Ladd, and her chief technology officer, Anjana Rajan, had flown in from Silicon Valley to make a presentation. Ladd began with a personal story, about how, after taking part in her high school's production of "The Vagina Monologues," she was labelled a "sex nerd," only to have her first sexual experience in college be an

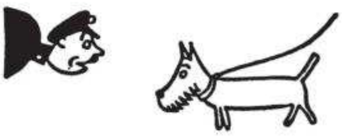
assault by a friend. She enumerated the reasons that victims like her often don't report assault—shame, fear, a wish not to ruin the assailant's life. "But why victims do report is fairly consistent, and the No. 1 reason they do report is to protect others, to protect their community," she said.

There were questions: How much does it cost to use Callisto? (Forty dollars per person annually, which Ladd hoped would be borne by unions, not individuals. "Less than a Netflix subscription," she said.) How many matches of offenders would trigger Callisto? (Two.) How does Callisto insure that its data are not compromised? (Encryption.) Will Callisto cross industries? (Yes. "It will be one shared system," Ladd said. "Which means that if somebody starts this behavior in college, and they continue it in grad school, and they continue it when they go to one industry, and they continue it when they go to another, their track record follows them." Bleak chuckles ensued.) Will Callisto retain the reports submitted by victims who may no longer be enrolled in the service? ("Don't tell anybody, but yes," Ladd said.)

Exactly how Callisto might be used as a way of keeping tabs on an industry as decentralized as the theatre business was something that still needed to be worked out. Tonya Pinkins, an actor, noted that ASCAP, the music-licensing organization, has an algorithm for figuring out royalties—could something similar be adopted by theatrical institutions to cover the cost of Callisto? "Yeah," Ladd said, looking slightly alarmed. "We'd probably need you all to create that algorithm." (Last week, after the meeting, the Actors' Equity Association Council voted against adopting Callisto for its members.) One of the few men present asked whether there were protections in place to guard against trolls or 4chan dudes messing with the system and submitting false reports. Rajan said that the service was built to encourage accountability; she hoped that "if you are using this maliciously, you would stop and say, I'm abusing a product that's meant to help people." But, given the example set by the bad actors currently dominating the national stage, it seemed best not to rely on hope as a guard against "particularly shitty guys," as the questioner called them. "Yes, we are designing for that use case," Rajan acknowledged, wearily.

—*Rebecca Mead*

BEST FRIENDS DEPT.
BOY MEETS DOG



Last week, the New York première of the new Wes Anderson movie, "Isle of Dogs," a stop-motion love story between man and beast set on a fantastical garbage-covered island in the Japanese archipelago, brought several of its stars to town. On a blizzardy Wednesday, the movie's boy hero, Atari Kobayashi (Koyu Rankin, age eleven), and his beloved bodyguard dog, Spots Kobayashi (Liev Schreiber, age fifty)—met in a midtown hotel suite, along with the head of the film's puppet department, Andy Gent, of London, who has worked with Anderson since "Fantastic Mr. Fox." Atop two pedestals stood a tidy series of man-made alpha dogs, with tags reading "CHIEF," "REX," "BOSS," and so on. Each was the size of a young Chihuahua.



Koyu Rankin and Liev Schreiber

The puppets, by design, look noble and haggard; life on Trash Island isn't easy. After a suspicious outbreak of dog flu in Megasaki City, dogs have been banished and are fending for themselves, scrounging for food among maggots and toxic waste. Into this landscape flies the brave orphan Atari, who has hijacked a puddle jumper in order to search for Spots. It's a bumpy arrival, and he speaks untranslated Japanese, but Chief and Co. are committed to helping him out. The movie gets at "the depth of our relationship to dogs," Schreiber said. Anderson sacrifices some moments of comedy, he added, "in exchange for something more emotional, which is a risk to any artist."

Spots and Atari, seen together in flashback, communicate through soulful whistling and special dog-and-master translation headsets. ("*Moshi moshi*." "I can hear you, Master Atari.") In real life, Rankin and Schreiber are friendly but less familiar; they first met last month, at the Berlin Film Festival. In midtown, they contemplated their puppets, a fluffy spotted hound and a freckled boy with a black eye. Rankin, who is bilingual and lives in Vancouver with his parents, first saw Atari when he visited the studio in London. "I didn't imagine him to have all those bruises and scratches," Rankin said. And he'd anticipated "like, normal pilot clothing." Atari's flight suit, which Anderson designed, is silver, with special pockets for a key and a dog biscuit.

"They went for more of an astronaut vibe, didn't they," Schreiber said.

Gent said, "When Wes saw that fabric, he said, 'So Ziggy Stardust!'"

"I was going to say! It looks like a Japanese David Bowie," Schreiber said. A dog owner ("a rescue from Hurricane Harvey, a terrier mix. I think there is some wire-haired dachshund. I think there might be some Chihuahua"), Schreiber is in tune with the dog within. "I'm a world-class dog guy," he said. "I do a great dog voice. Sadly, Wes wants a very naturalistic read from the actors, and he generally, in my opinion, looks for actors who are somewhere on the periphery of deep neuroses." At home, he said, he talks in his dog voice "constantly."

The film used some thousand models: five hundred dogs and five hundred humans. Gent described the dog-making process, from early modelling ("what I'd call the Giacometti-like sculpt—very quick and thumby") to final fur. "All of these guys have got Teddy-bear alpaca mohair fur that's dyed into their various colors, and then it's shaved off of the backing and glued onto ladies' tights," he said. The puppets are small but heavy, like paperweights. "Inside, they're like steam engines," Gent said. "All hard metal working parts."

"You remember the Terminator movie when Schwarzenegger's skin comes off?" Schreiber said. "It's that much metal fabrication in there. You can feel the skeleton

and the ribs." He explored Spots's snout. "The lips, the mouth"—he bared the teeth, pointy and plentiful—"the ears. Everything is designed to articulate independently."

Anderson entered, looking pleased, in a blue pinwale-corduroy suit, a plaid shirt, and a knitted pink necktie. He talked about the movie's influences, cinematic and garbagey; "Isle of Dogs" revels in refuse as much as previous Anderson films revelled in funiculars and bellhop hats. "We have very *organized* garbage in the movie," Anderson said. "I don't know why I thought garbage was a good idea. I always liked 'Fat Albert'—they were in a dump. I liked 'Sanford and Son,' where he sells junk. I always liked Oscar the Grouch, who lived in a garbage can. There's a bit of Oscar in these dogs."

"A little bit, 'Fat Albert' was this post-apocalyptic thing," Schreiber said.

"That's right. Like a natural landscape, but man-made. It's not controlled by man, exactly, it's just put out there."

"It also feels evocative to me in terms of Kurosawa—the landscapes of detritus," Schreiber said. "A beach of tires, a mountain of bottles. There's something wonderful about that."

As the movie proceeds, forces of good, in the form of plucky dogs, kids, and scientists—one voiced by, and named after, Yoko Ono—begin to gather steam against the forces of anti-dog political corruption. Does Rankin remember what Atari was saying in his rousing Japanese-language speeches? No—he was eight when he recorded them. But Anderson, who wrote them, does. " 'I turn my back on mankind! You are all my dogs!' " Anderson said. "He's giving up on the adults, I guess."

—*Sarah Larson*

TIME CAPSULE
RUSSIA REDUX



Even the weather was starting to turn Russian in Washington last week, as the creators and cast of "The Americans" rolled into town to celebrate the launch of the show's final season on FX. When the series, a period piece about a family of spies from the Soviet Union living under deep cover as ordinary suburbanites, premièred, five years ago, it had the cheery glow of the eighties—the cars were boxy, the computers clunky, and it was always morning in America. "The computers are so old that we can't get any of them to work anymore," Matthew Rhys, who stars as the husband, Philip Jennings, said during a reception at the Newseum. "Anything you see on the screens is put on during post-production."

The real surprise from "The Americans" has been how topical the show turned out to be, notwithstanding its primitive mobile phones and references to Robert Bork's Supreme Court confirmation hearings. Five years ago, the notion of Russians trying to dictate what goes on in Washington looked merely quaint. Joe Weisberg, the creator of the series (and a former C.I.A. operative), insists that he wasn't anticipating the controversies surrounding the 2016 election when he came up with the idea for the show. (The story is loosely based on several families of Soviet sleeper agents who were arrested in 2010 after having lived in the United States for many years.)

"The idea behind the series was to look at the whole concept of 'the enemy,'" Weisberg said at the première. "Let's look at the worst of them—the K.G.B.—and humanize them. That depended on the show taking place in a time removed from the thick of the Cold War. The fact that the Cold War is back actually complicates the story for us. People ask us how we were so prescient. We weren't prescient. We were the opposite of prescient." As Joel Fields, who is a co-showrunner with Weisberg, put it, "There was a point when the world seemed to be moving toward unity and understanding after the Cold War. Everyone was going to join in the shared pursuit of the capitalist ideal. That was the perspective when we started." But now, the scale of the current scandals engulfing the Trump Administration dwarfs the individual efforts of the Jennings family. "Facebook, Instagram, and YouTube make Philip and Elizabeth look small-time," Fields said.

As any fan of "The Americans" knows—and several hundred of them braved the weather for a screening of the new season's first episode, which will be broadcast on March 28th—the real appeal of the series rests on its domestic, rather than its geopolitical, drama. "It's a show about a marriage," Keri Russell, who plays Elizabeth, said. "And that's what people have been relating to for all these years." What has given "The Americans" an especially piquant charge is the evolving reversal of traditional gender roles. In recent seasons, Philip has retreated from the world of derring-do, embracing instead a simpering self-help doctrine emblematic of the era, while Elizabeth has turned into an ever more remorseless assassin. Marital strife ensues.

Shooting for the final season ended only a few weeks ago, and the cast still seemed to be coming to terms with saying goodbye to their long-term alter egos. Rhys and Russell, who are an off-camera couple as well, have never visited Russia, but said that they may someday decide to make a trip there. Noah Emmerich, who plays the doltish F.B.I. agent Stan Beeman, may even miss viewers berating him on the street



Keri Russell

for his ongoing failure to catch the spies right under his nose. " 'I know, I know,' I tell them," he said. " 'I've seen the show, too.' " Holly Taylor, who plays the Jenningses' daughter (and apprentice spy), Paige, said, "I started this show when I was fourteen, and now I'm twenty. It feels like my whole life."

Perhaps because Rhys, in real life, speaks with a brogue from his native Wales, he appears most ready to move on. Russell seems more ambivalent about leaving her character behind. (At a minimum, the couple is unlikely to have such a convenient gig again. They would ride their bikes from their house

in Brooklyn to the set, near the Gowanus Canal.) "Elizabeth is strong and sexy and powerful," Russell said. "I don't think I'll miss killing so many people. But I'd still like to scare them."

—*Jeffrey Toobin*

COMMERCE DEPT.
LOOSE CHANGE



The names of the newest cryptocurrencies betray the increasing desperation pooling in this sector of the economy: Jesus Coin, Bananacoin, TrumpCoin, PutinCoin, titcoin, potcoin, and, yes, Ponzicoin. The new exercise app Sweatcoin is not exactly a cryptocurrency; it tallies the footfalls you make outdoors and rewards you with one sweatcoin for every thousand and fifty steps. It then allows you to use this digital currency to purchase items on the app's Web site.

Hoping to convert his daily constitutional into cash, a correspondent recently amassed more than a hundred sweatcoins by walking around New York, and then investigated what he could reap from his labors. At the Gap, when a clerk ringing up the correspondent's purchase asked, "Do you have a Gap card?," the correspondent said, "No, but I have sweatcoin." The clerk furrowed his brow and demanded legitimate currency. A cashier at Astor Place Hairstylists was impressed by the concept, when it was explained to him ("Sounds like a million-dollar idea"), but was unwilling to accept sweatcoins as payment for a haircut.

The correspondent upped his salesmanship. He told a Uniqlo employee, "Sweatcoin is great if you want to get off the grid and give big banks the finger." To a Lululemon salesperson, he said, "I thought you guys and Sweatcoin might be in cahoots, because you're both based in the production of sweat." At SoulCycle, he argued, "When you think of all the low-down things people have done for money through the ages, Sweatcoin seems so much more wholesome." No takers.

The correspondent then crossed the river to the Brooklyn neighborhood of Fort Greene, where several stores accept bitcoin. But he was turned down at the Lean Crust pizzeria, Greene Avenue Market, and the Fresh Garden market. An employee at Mirai Wellness Nail and Spa, on Fulton Street, sounded intrigued by the idea of being paid in sweatcoins but said that she would have to get an O.K. from her manager, who was not around. The correspondent offered, "I could also just walk in a circle around the spa for an hour."

The computer power needed to create a bitcoin requires as much electricity as the average American household uses in two years, but the only burnout from sweatcoin was the correspondent's good will. He decided to pursue an alternative route: he would use his sweatcoins to buy products on the app, and then try to sell them.

"Products" is a generous word. Many of the things available for sale on the site are trial memberships in other health apps or gift cards for compression stockings. The correspondent used sweatcoins to buy some of these items (gift cards for Barbell athletic wear and Charmz bracelets, a week of online classes from OfCourse), and then put them up for sale on Craigslist. There were no nibbles, apart from a strange phone message: "I saw your thing on Craigslist. It said the Poconos. I do like what I've read. You're a bigger woman, I'm a smaller guy. I weigh one-forty, I'm five feet nine inches. If you're down in the Poconos for the weekend, give me a call."

Frustrated, the correspondent listed his sweatcoin purchases on the oFree app, which helps users barter or give away possessions. Shortly after posting a subscription to an online magazine called Minimalism Life, he received a message from a young female swapper. The two met in the lobby of a midtown office building so that the correspondent could pick up the two items he'd selected from her oFree page: a one-volt USB car-phone charger and an iPhone charger. When the young woman saw the correspondent frowning at the masking tape that held the iPhone charger's frayed cable together, she said, "Sometimes it works, sometimes it doesn't."

Undeterred, the correspondent headed to Canal Street, where he tried to sell his new possessions. Focussing his efforts on the brand-new USB car-phone charger (value: a dollar), he told several venders, " 'USB' means 'you save big.' "

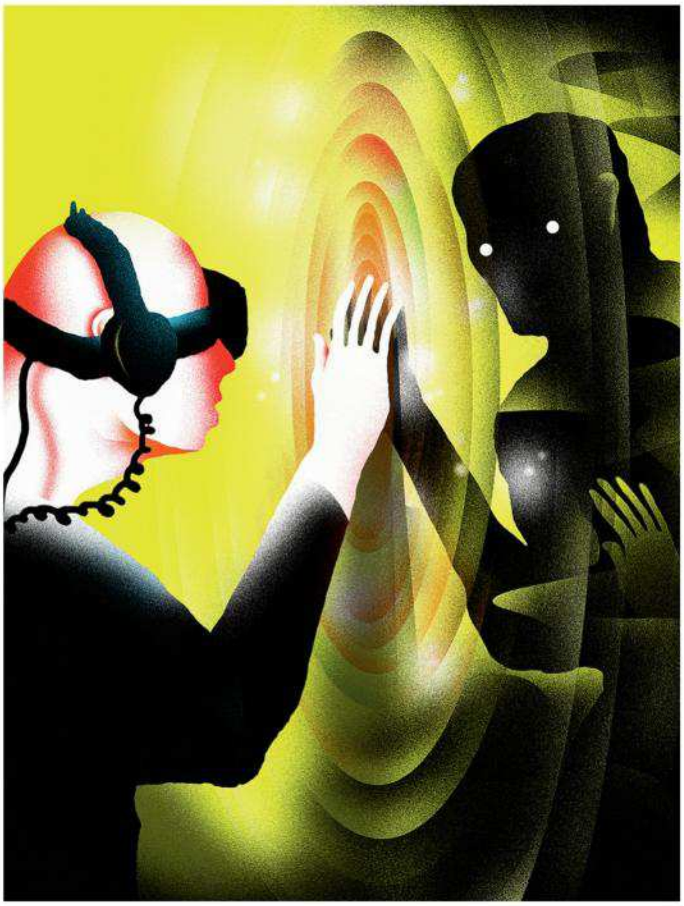
After six turndowns, one vender took the charger in his hand and offered the correspondent twenty-five cents. Sold. As the vender reached into his cash register for a quarter, he caught sight of the iPhone charger and its unsexy masking tape. He wrinkled his nose. "Also for sale," the correspondent said. "For a buyer who likes a challenge."

—*Henry Alford*



"George is a deep thinker, but his thoughts rarely come to the surface."

BRAVE NEW WORLD DEPT.



As Real as It Gets

Are we already living in virtual reality?

BY JOSHUA ROTHMAN

Thomas Metzinger had his first out-of-body experience when he was nineteen. He was on a ten-week meditation retreat in the Westerwald, a mountainous area near his home, in Frankfurt. After a long day of yoga and meditation, he had a slice of cake and fell asleep. Then he awoke, feeling an itch on his back. He tried to scratch it, but couldn't—his arm seemed paralyzed. He tried to force the arm to move, and, somehow, this shifted him up and out of his body, so that he seemed to be floating above himself. Gazing out into the room, he was both amazed and afraid. He heard someone else breathing and, in a panic, looked around for an intruder. Only much later did he realize that the breathing had been his.

At the time, in the early nineteen-eighties, Metzinger was a philosophy student researching the mind-body problem at the Johann Wolfgang Goethe-Universität. During the postwar years, Theodor Adorno and Max Horkheimer had made the university's Institute for Social Research—the Frankfurt School—a center of neo-Marxist thought, and the campus remained a politically radical place. In Britain and America, philosophers, computer scientists, psychologists, and neuroscientists were working together to reconceive the mind as a purely physical system created by the brain. In Metzinger's department, such theories were denounced as anti-human and "proto-fascist." Metzinger considered himself a radical—he had waist-length hair, and was proud to have been tear-gassed while protesting the U.S. military—but also a rationalist. Immersing himself in the work of the Anglophone philosophers, he'd eventually become convinced that his soul was made by his brain. He was, therefore, doubly shocked by his out-of-body experience, which had seemed irrevocably real. Could materialism be wrong? Could consciousness exist immaterially, outside of the body? He admonished himself: "How arrogant I have been!"

Metzinger began reading about out-of-body experiences. He learned that between eight and fifteen per cent of the population reports having had an "O.B.E."—perhaps during the night, or after surgery—and that, for millennia, people have seen in such experiences evidence for various mystical theories of the soul. (Many religious traditions hold that there is a "subtle body," or immaterial version of the self, capable of travelling through space.) Meanwhile, on occasional evenings, he floated around his room. One night, he tried to use the light switch (it didn't work); he decided to fly through the window and visit his girlfriend, but woke up instead. Metzinger began experimenting on himself. Following the advice of New Age "astral travellers," he stopped drinking liquids at noon, stared at a glass of water in his kitchen, and then slept with salt in his cheek, hoping to travel back to the glass at night. Before a minor surgery, he persuaded his anesthesiologist to alter his medication so that he could wake up early enough to experience the effects of the drug ketamine, which is famous for inducing out-of-body experiences. The salt had no effect, and the ketamine resulted in hours of unpleasant phantasmagoric hallucinations. Metzinger could find no way to produce O.B.E.s on demand, or to study them systematically.

In 1983, the psychologist Philip Johnson-Laird had published a book called "Mental Models," in which he argued that people often think not by applying logical rules but by manipulating models of the world in their minds. If you want to know whether a rug will go with your sofa, you don't deduce the answer—you imagine it, by moving furniture around on a mental stage set. During

ILLUSTRATION BY DANIEL ZENDER

a heated dinner conversation in Tübingen, the psychologist Susan Blackmore, who had studied O.B.E.s, suggested to Metzinger that he hadn't actually floated around his room: "You were probably moving around your mental map, in your world model," she said. "No fucking way!" Metzinger remembers thinking. "These experiences are too realistic!" Later, he decided that Blackmore was right. Having read Johnson-Laird, he'd begun to wonder whether reality, as we experience it, might be a mental stage set—a representation of the world, rather than the world itself. Having an O.B.E. could be like visiting the set at night, when it wasn't being used. Metzinger started to think about how such a model might be constructed. Some internal mental system must function as an invisible, unconscious set dresser, making an itch feel like an itch, coloring the sky blue and the grass green.

As Metzinger developed these ideas, he also had fewer out-of-body experiences. Eventually, they ceased altogether; he set the subject aside and became an eminent philosopher of mind. Then, in 2003, he heard from a Swiss neuroscientist named Olaf Blanke, who had learned how to give people out-of-body experiences when they were fully awake. While treating a forty-three-year-old woman with epilepsy, Blanke had applied electrical current to a particular area of her brain, and she had the experience of floating upward and looking down at her own body. Blanke had found many related illusions. Stimulating another location in the brain created the impression of a doppelgänger standing across the room; stimulating a third created the "sense of a presence"—the feeling that someone was hovering nearby, just out of sight. Unsure how to interpret these results, Blanke had searched the literature and come across some papers by Metzinger. They took the idea of mental models to its logical conclusion. It isn't just that we live inside a model of the external world, Metzinger wrote. We also live inside models of our own bodies, minds, and selves. These "self-models" don't always reflect reality, and they can be adjusted in illogical ways. They can, for example, portray a self that exists outside of the body—an O.B.E.

Metzinger and Blanke set about hacking the self-model. Along with the cognitive scientists Bigna Lenggenhager and Tej Tadi, they created a virtual-reality system designed to induce O.B.E.-like episodes. In 2005, Metzinger put on a virtual-reality head-mounted display—a headset containing a pair of screens, one for each eye, which together produce the illusion of a 3-D world. Inside, he saw his own body, facing away from him, standing in a room. (It was being filmed by a camera placed six feet behind him.) He watched as Lenggenhager stroked its back. Metzinger could feel the stroking, but the body to which it was happening seemed to be situated in front of him. He felt a strange sensation, as though he were drifting in space, or being stretched between the two bodies. He wanted to jump entirely into the body before him, but couldn't. He seemed marooned outside of himself. It wasn't quite an out-of-body experience, but it was proof that, using computer technology, the self-model could easily be manipulated. A new area of research had been created: virtual embodiment.

From 2010 through 2015, the virtual-reality researchers Mel Slater and Mavi Sanchez-Vives worked with Metzinger and Blanke, in a fourteen-partner E.U.-funded project called Virtual Embodiment and Robotic Re-Embodiment. Their labs, in Barcelona, used immersive virtual reality to manipulate the body models of research subjects, convincing them that the bodies they possessed in V.R. were their own. (Slater and Sanchez-Vives are married; they met at a V.R. workshop, in 2001.) "We have the illusion that our body model is very stable, but that's only because we've never encountered anything else," Sanchez-Vives said. People who are extremely aware of their bodies—dancers, athletes, yogis—can find the adoption of a virtual body difficult, because they have trouble "letting go." "But the more you do it the easier it becomes. After you've experienced it once, twice, you click into it." In the past few years, Slater, Sanchez-Vives, and other virtual-embodiment researchers have discovered therapeutic and educational uses for the technology. Meanwhile, Metzinger, along with the philosopher Michael Madary, has drafted a virtual-reality "code of ethics" focussed on embodiment, which he believes makes V.R. fundamentally different from all other media. Embodied virtual experience, the

philosophers write, can change us profoundly. It can affect us in ways we barely understand, redefining "the very relationship we have to our own minds."

As soon as virtual reality became workable, in the early nineteen-eighties, researchers imagined creating vivid, detailed, hallucinogenic worlds. In the memoir "Dawn of the New Everything," the V.R. pioneer Jaron Lanier recalls evangelizing the technology by describing a virtual two-hundred-foot-tall amethyst octopus with an opening in its head; inside would be a furry cave with a bed that hugs you while you sleep. ("Virtual reality tugs at the soul because it answers the cries of childhood," Lanier writes.) Later, the "Matrix" movies imagined a virtual world so accurate as to be indistinguishable from real life. Today's most advanced V.R. video games conjure visually rich space stations (Lone Echo), deserts (Arizona Sunshine), and rock faces (The Climb). The goal is to convince you that you are somewhere else.

Virtual embodiment has a different goal: convincing you that you are someone else. This doesn't require fancy graphics. Instead, it calls for tracking hardware—which allows your virtual body to accurately mirror the movements of your real head, feet, and hands—and a few minutes of guided, Tai Chi-like movement before a virtual mirror. In Slater's lab, at the Universitat de Barcelona, I put on a V.R. headset and looked into such a mirror to see the body of a young woman wearing jeans, a T-shirt, and ballet flats. When I moved, she moved.

"You're going to see a number of floating spheres, and you have to touch them," Guillermo Iruretagoyena, a software developer, said.

A few colorful balls appeared near my hands and feet, and I moved my limbs to touch them. The spheres disappeared, and new ones took their place. After I touched the new spheres, Iruretagoyena explained that the "embodiment phase" was complete—I had tricked my brain into thinking that the virtual limbs were mine. My virtual self didn't feel particularly real. The quality of the virtual world was on a par with a nineteen-nineties video game, and when I leaned into the mirror to make eye contact with myself my face was planar and cartoonish. Like a vampire's, my body cast no shadow.

To my right, I heard the sound of keys in a door. I turned and saw a hallway. At the end of it, a man entered, with dark hair and a beige sweater.

"You fat cow," he said, in a low voice. "Would it hurt to put on something nice?"

He began walking toward me. I looked at myself in the mirror. "Look at me!" he shouted. He walked up to a dresser, saw my cell phone, and threw it against the wall.

I watched, merely interested. It was obvious that he was a virtual person; I was no more intimidated by him than I would be by an image on a screen. Then he got closer, and closer still, invading my personal space. In real life, I'm tall, but I found myself craning my neck to look up at him. As he loomed over me, gazing into my eyes, I leaned away and held my breath. I could sense my heart racing, my chest tightening, and sweat breaking out on my temples. I felt physically threatened, as though my actual body were in danger. "This isn't real," I told myself. Still, I felt afraid.

Since 2011, the regional government of Catalonia has collaborated with the lab to use this simulation in rehabilitation programs for abusive men. In a controlled study performed in Sanchez-Vives's lab by the psychologist Sofia Seinfeld, and recently published in *Nature Scientific Reports*, the men who experienced the simulation got significantly better at recognizing fear in the faces of women. (Domestic abusers tend to be deficient in this regard.) In the past three years, hundreds more abusive men have experienced the simulation outside the lab, as part of a larger rehabilitation program. Preliminary data, which Sanchez-Vives and Slater are hesitant to publish because of the small sample size, suggest that the men's recidivism rates are lower. ("I felt identified with my ex-wife," one man recalled. "I thought he was going to hit me, so I covered my face with one of my hands," another said.) Men who have merely watched a video, or experienced a V.R. simulation without undergoing the embodiment process, report fewer such epiphanies.

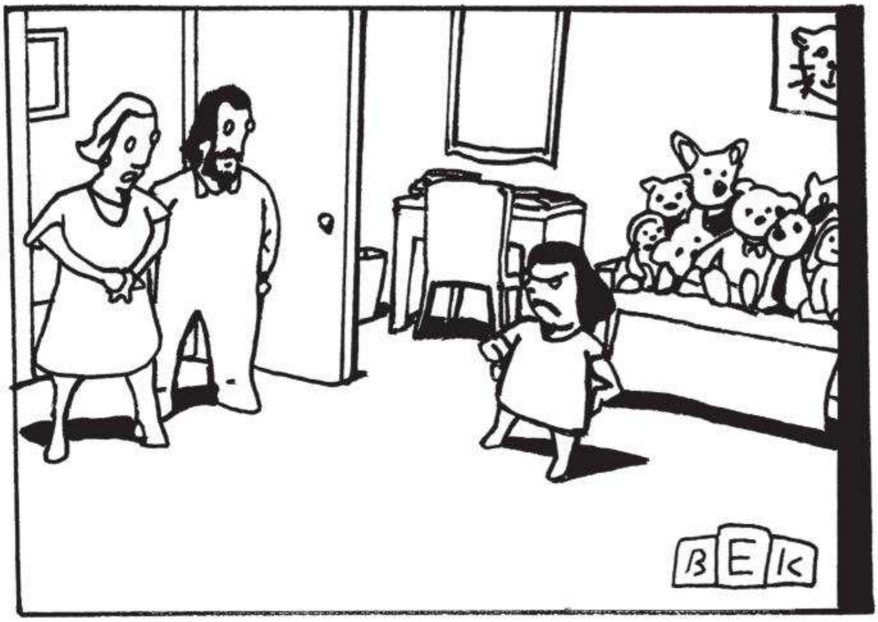


Slater, a slight, soft-spoken Englishman in his sixties with a youthful, amazed demeanor—he could be an especially placid incarnation of the Doctor, in "Doctor Who"—walked me to the campus coffee bar. At a table by the window, he tried to explain how virtual embodiment might effect such changes. "No one really understands what this technology is and how it can be used," he said. "On some level, the brain doesn't know the difference between real reality and virtual reality. And a character on a 2-D screen is completely different from one that's your height and looks you in the eye."

With a team of various collaborators, Slater and Sanchez-Vives have created many other-body simulations; they show how inhabiting a new virtual body can produce meaningful psychological shifts. In one study, participants are re-embodied as a little girl. Surrounded by a stuffed bear, a rocking horse, and other toys, they watch as their mother sternly demands a cleaner room. Afterward, on psychological tests, they associate themselves with more childlike characteristics. (When I tried it, under the supervision of the V.R. researcher Domna Banakou, I was astonished by my small size, and by the intimidating, Olympian height from which the mother addressed me.) In another, white participants spend around ten minutes in the body of a virtual black person, learning Tai Chi. Afterward, their scores on a test designed to reveal unconscious racial bias shift significantly. "These effects happen fast, and seem to last," Slater said. A week later, the white participants still had less racist attitudes. (The racial-bias results have been replicated several times in Barcelona, and also by a second team, in London.) Embodied simulations seem to slip beneath the cognitive threshold, affecting the associative, unconscious parts of the mind. "It's directly experiential," Slater said. "It's not 'I know.' It's 'I am.'"

Slater envisages salubrious, even beatific ways of learning through virtual embodiment. "Imagine if you're afraid of public speaking. Now you can experience being embodied as Angelina Jolie and giving a speech in front of thousands of cheering people," he said. (The confidence you feel while embodied as Jolie would, he thinks, follow you back into

your own body.) In 2015, for an art exhibit at the Centre de Cultura Contemporània de Barcelona, Slater's team built a virtual reality in which participants lived together on a psychedelic tropical island, embodied as elegant humanoids reminiscent of the blue Na'vi, from "Avatar." In the course of an hour and a half, their virtual bodies grew old and died; after death, the participants reviewed their virtual lives in a flashback, then floated upward into a tunnel of white light. When they took off their headsets, they watched, on a screen, as their island compatriots built a memorial to them. People who have near-death experiences emerge with new ideas about the meaning of life; Slater's lab is studying whether virtual death might have a similar effect. "We were trying to play with the implicit idea that there could be immortality, and that this life is a virtual life—as though, after we die, we take off our headsets and are on another plane," he said.



"We've given it a great deal of thought and we decided we're going to give in to everything you want at all times."

Virtual embodiment isn't always uplifting. In 2015, the video-game company Capcom released Kitchen, a virtual-reality horror scenario in which the player is tied to a chair while a deranged woman plunges a knife into his thigh. In the V.R. game Surgeon Simulator, players use power drills, bone saws, and other tools to vivisect a humanoid alien that writhes in pain on the operating table. As in most V.R. video games, players in Kitchen and Surgeon Simulator move in fanciful ways and are, at best, semi-embodied. Even so, in the book "Experience on Demand," Jeremy Bailenson, a leading V.R.-embodiment researcher at Stanford, reports that after performing a virtual vivisection he "simply felt bad. Responsible. I had used my hands to do violence." Pushing a Punch or Shoot button on a game controller and watching the results on a screen, he writes, is "an entirely different experience" from playing an immersive, first-person V.R. game in which you use your virtual arms and hands to strike or stab an opponent, or to aim a gun at him and pull the trigger. In their V.R. code of ethics, Metzinger and Madary predict that the "risk of users suffering psychological trauma will steadily increase as V.R. technology advances." Metzinger believes that virtual killing and sexual violence should be prohibited. He also worries about scenarios that encourage the character traits that psychologists refer to as "the dark triad": narcissism, Machiavellianism, and psychopathy. He fears the effects of a V.R. "Westworld."

"It's inevitable what's going to happen," Slater said, over coffee. "There's going to be a moral panic around V.R. as it spreads and spreads, just as there was with comics, with television. It's going to be the root of every evil, and there's going to be a huge campaign against it. I hope the companies realize this, because they have to be prepared for it." Slater, who led the Virtual Embodiment and Robotic Re-Embodiment project and, with the other researchers, worked with Metzinger on the V.R. code of ethics, thinks some caution is justified: "Virtual reality is going to be quite widespread, and in the home. And although it's been around in more or less the form it is now for thirty, forty years, with head-mounted displays, and so forth, there's nobody who's spent hours and hours, week after week, month after month, in virtual reality. Nobody knows what's going to happen."

After our coffee, Slater walked me back to the lab. It was an unusually cold day, and the campus was hushed and empty. Jaron Lanier writes in his memoir that the best part of V.R. comes after you remove the headset: having been immersed in a comparatively flat computer-generated world, one finds that, in real life, "the most ordinary surface, cheap wood or plain dirt, is bejeweled in infinite detail for a short while." As we walked, I was spellbound by pine needles and by the texture of concrete. I marvelled at the Escher-like dimensionality of a stairway, and at the snowflakes that had begun to drift among the palm trees.

Inside, I followed Slater up a flight of stairs. On the landing, we passed a tall humanoid robot with expressive eyes; its metal skeleton was visible beneath white plastic skin. In a nearby lab, Laura Aymerich, a psychologist, and Sameer Kishore, a roboticist, helped me into a skintight Velcro suit covered in white plastic dots. I put on headphones and a V.R. headset. The headphones were silent, and the headset was dark. For a few minutes, I stood there, alone with my thoughts.

"Sorry," Kishore said. "Technical difficulties."

Then the headset activated, and I appeared to be on the landing, by the stairs outside the lab. I was looking through the eyes and hearing through the ears of the robot. Kishore wheeled a small standing mirror into position so that I could see myself. To my surprise, my face—the robot's face—was now lit from within and glowing blue.

The robot's movements tracked mine;

I moved my robotic arms up and down, and my head from side to side. When I looked to my left, I saw Slater, standing by the stairs; when I looked to my right, I could see through a window to the courtyard, where snowflakes floated. There was a slight lag between my head movements and the robot's, and when I perceived it I felt half-embodied, as if I'd had too much to drink.

"The visual aspect of it is strong, but the sensorimotor aspect of it is conflicting," Kishore said. "If you're trying to move your head and it doesn't move, that leads to a break in the feeling of embodiment." I was only half paying attention; I was transfixed by the robot's metal hands, which seemed to move when I willed them to. With both my heads, I nodded.

Aymerich appeared in my field of view. "High five!" she said. We high-fived. She crossed over to my other side. "Now shake hands," she said. We shook. Because there was no way for sensation to travel from the robot's hands to mine, the handshake was a purely visual experience. Aymerich walked away, then returned, holding up my coat. "Reach out and touch your jacket," she said. Slowly, I extended my arm, watching as my metal fingers moved toward the fabric. When they reached it, I was startled by a tingling sensation in my fingertips—a phantom touch.

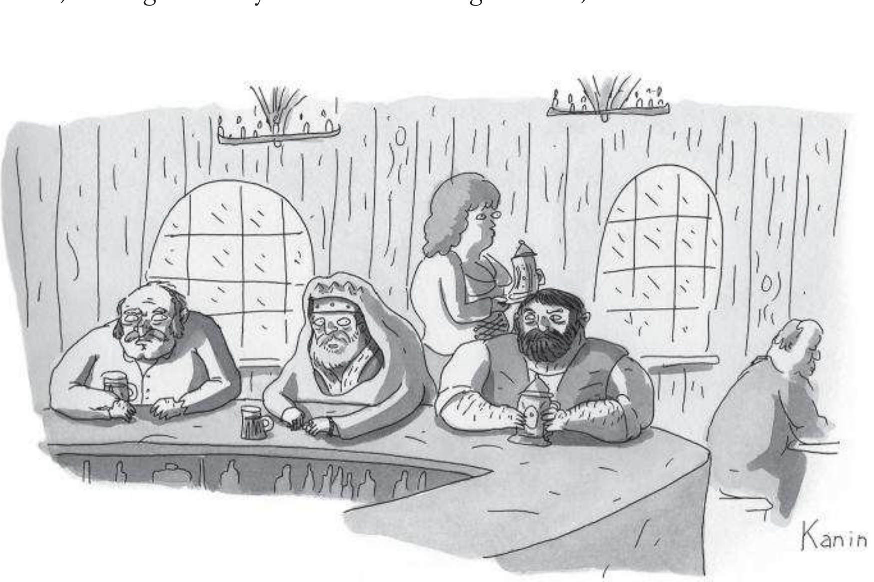
"I feel something," I said. I concentrated on the feeling. It was really there—a warm, swirling electricity.

In the eighteenth century, the philosopher George Berkeley argued that reality was all in our minds. Samuel Johnson had no patience for this idea; he declared, "I refute it thus!" and kicked a stone. Two centuries later, the poet Richard Wilbur wrote a rejoinder:

> Kick at the rock, Sam Johnson, break your bones:
> But cloudy, cloudy is the stuff of stones.

"It's not real, but it doesn't matter," Slater said, watching me. "In some sense, it's a real experience."

To Thomas Metzinger, a phrase like "real experience" is a riddle to be solved. Now sixty, he resembles a German Steve Jobs, with short, steel-gray hair, architectural glasses, and a stern, sculptural face; sleek and fit, he has the formidable, watchful serenity of someone who has meditated twice a day for forty-one years. "I have a long story to tell," he said, in a gentle German accent. "I think that, in the human self-model, there are many layers. Some layers are transparent, like your bodily perceptions, which seem absolutely real. You just look"—he gestured toward a chair next to us—"and the chair is there. Others are opaque, like our cognitive layer. When we're thinking, we know that our thoughts are internal mental constructs, which could be true or false." As a philosopher, Metzinger's method has been to see if the transparent can be made opaque. In books such as "Being No One" and "The Ego Tunnel," he aims to show that aspects of our experience which we take to be real are actually "complex forms of virtual reality" created by our brains.



"I, for one, enjoy paying my taxes."

Imagine that you are sitting in the cockpit of an airplane, surrounded by instruments and controls. It's a futuristic cockpit, with no windows; where the windshield would be, a computer displays the landscape. Using this cockpit, you can pilot your plane with ease. Still, there are questions you are unable to answer. Exactly what kind of plane are you flying? (It could be a Boeing 777 or an Airbus A380.) How accurate is the landscape on the screen? (Perhaps night-vision software has turned night to day.) When you throttle up the engines, you feel a rumbling and hear a roar. Does this mean the plane is accelerating—or could those effects have been simulated? Both scenarios might be true. You could be using a flight simulator to fly a real plane. This, in Metzinger's view, is how we live our lives.

The instruments in an airplane cockpit report on pitch, yaw, speed, fuel, altitude, engine status, and so on. Our human instruments report on more complicated variables. They tell us about physical facts: the status of our bodies and limbs. But they also report on mental states: on what we are sensing, feeling, and thinking; on our intentions, knowledge, and memories; on where and who we are. You might wonder who is sitting in the cockpit, controlling everything. Metzinger thinks that no one is sitting there. "We" are the instruments, and our sense of selfhood is the sum of their readouts. On the instrument panel, there is a light with a label that says "Pilot Present." When the light is on, we are self-conscious; we experience being in the cockpit and monitoring the instruments. It's easy to assume that, while you're awake, this light is always on. In fact, it's frequently off—during daydreams, during much of our mental life, which is largely automatic and unconscious—and the plane still flies.

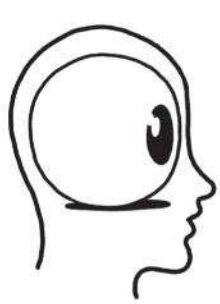
Two facts about the cockpit are of special importance. The first is that although the cockpit controls the airplane, it is not itself an airplane. It's only a simulation—a model—of a larger, more complex, and very different machine. The implication of this fact is that the stories we tell about what happens in the cockpit—"I pulled up on the stick"; "I touched my jacket"—

are very different from the reality of what is happening to the system as a whole. The second fact, harder to grasp, is that we cannot see the cockpit. Even as we consult its models of the outer and inner worlds, we don't experience ourselves as doing so; we experience ourselves as simply existing. "You cannot recognize your self-model *as* a model," Metzinger writes, in "Being No One." "It is transparent: you look right through it. You don't see it. But you see *with* it." Our mental models of reality are like V.R. headsets that we don't know we are wearing. Through them, we experience our own inner lives and have inner sensations that feel as solid as stone. But in truth:

> Nobody ever *was* or *had* a self. All that ever existed were conscious self-models that could not be recognized as models. . . . You are such a system right now. . . . As you read these sentences, you constantly *confuse* yourself with the content of the self-model activated by your brain.

When I first encountered the ideas in "Being No One," many years ago, I thought I understood them. I had read about amputees who feel the presence of "phantom limbs," and it made sense to think that this was because their body models were out of synch with reality. I accepted that the same could be true of our inner states—just as a person without an arm can experience its presence, so a person without free will might experience using it because her "self-model" includes the idea of making choices. And yet it wasn't until I visited Slater's lab that the full force of these ideas struck me. While embodied as a robot, I had felt a phantom touch—a real-seeming product of my body model—and this had unnerved me. But wasn't I feeling phantom touches all the time? Whenever I experienced an emotion, had a thought, or made a choice, wasn't I interacting with a fiction, a story that my self-model was telling me about an infinitely stranger, perhaps impersonal process unfolding in my brain? My inner world was virtual, too.

In a Frankfurt cake shop—"They say this is where Adorno took the women he seduced; many historical conversations happened here!"—Metzinger teased out the implications of this view of existence. "Do you know what an 'illusion of control' is?" he asked, mischievously. "If people are asked to throw dice, and their task is to throw a high number, they throw the dice harder!" He believes that many experiences of being in control are similarly illusory, including experiences in which we seem to control our own minds. Brain imaging, for example, shows that our thoughts begin before we're aware of having them. But, Metzinger said, "if a thought crosses the boundary from unconsciousness to consciousness, we feel, 'I caused this thought.' " The sensation of causing our own thoughts is also just another feature of the self-model—a phantom sensation conjured when a readout, labelled "thinking," switches from "off" to "on." If you suffer from schizophrenia, this readout may be deactivated inappropriately, and you may feel that someone else is causing your thoughts. "The mind has to explain to itself how it works," he said, spreading his hands.



Lately, Metzinger has been thinking about his own experience as a meditator. At the center of the meditative experience is the exercise and cultivation of mental autonomy: when the meditator's mind wanders, he notices and arrests that process, gently returning his mental focus to his breath. "The mind says, 'I am now re-directing the flashlight of my attention to this,' " Metzinger said. "But the thought 'I am redirecting my mind-wandering' might itself be another inner story." He leaned back in his chair and laughed. "It might be that the spiritual endeavor for liberation or detachment can lead to new illusions."

He looked at me reassuringly. "This doesn't mean that nothing is real," he said. "It doesn't mean that this is the Matrix—the simulation is running on some hardware. But it does mean that *you are not the model*. You are the whole system—the physical, biological organism in which the self-model is rendered, including its body, its social relationships, and its brain. The model is just a part of that system." The "I" we experience is smaller than, and different from, the totality of who and what we are.

It turns out that we do, in this sense, possess subtle bodies; we also inhabit subtle selves. While a person exists, he feels that he knows the world and himself directly. In fact, he experiences a model of the world and inhabits a model of himself. These models are maintained by the mind in such a way that their constructed nature is invisible. But it can sometimes be made visible, and then—to a degree—the models can be changed. Something about this discovery is deflating: it turns out that we are less substantial than we thought. Yet it can also be invigorating to understand the constructed, provisional nature of experience. Our perceptions of the world and the self feel real—how could they feel otherwise?—but we can come to understand our own role in the creation of their apparent realness. "The compensation of growing old," Virginia Woolf writes, in "Mrs. Dalloway," is that, while "the passions remain as strong as ever," we gain "the power which adds the supreme flavour to existence,—the power of taking hold of experience, of turning it around, slowly, in the light."

In embodied virtual reality, it's sometimes possible to glimpse yourself as the virtual object you really are. In Slater's lab, two psychologists, Solène Neyret and Tania Johnston, helped me into a V.R. headset. The day before, I had been scanned by an imaging system; now, inside the virtual world, I looked into the virtual mirror to see a virtual version of myself, wearing my clothes: blue shirt, gray jeans, brown boots.

"I need you to think of a personal problem that is causing a bit of distress in your life," Neyret said, while I went through a few embodiment exercises. "You will explain the problem to Freud. Then, when you finish speaking, you will press this button"—she guided my hand to a controller—"and you will enter Freud's body. Listen carefully to yourself, and try to give yourself some advice."

The virtual world shifted. I was sitting at a desk in an expansive, glass-walled house. Outside, wildflowers punctuated a sunlit lawn. Across from me, behind his own desk, sat Sigmund Freud. There was a large red light on my desk. It turned green.

I paused, uncertain how to begin. "My mother is in a nursing home, and when I get updates from people who visit her I feel guilty," I said.

I pushed the button, and the world

shifted again. Now I was Freud. I looked down at myself—white shirt, gray suit—and, in a nearby mirror, inspected my beard. Across from me, behind a desk, sat my avatar, wearing a blue shirt, gray jeans, and brown boots. He opened his mouth, then closed it. He settled his hands in his lap and looked at them.

"My mother is in a nursing home, and when I get updates from people who visit her I feel guilty," he said, in my voice.

Watching him, I felt fascination, curiosity, and pity. Was that me? He seemed like another person—a stranger. "Why do you feel guilty?" I asked, as Freud.

I pushed the button. Now I was sitting across the desk from Freud. I watched as he watched me, cocking his head. "Why do you feel guilty?" he asked. His voice was strange—older and lower than mine.

"Because I live far away," I said, as me.

I pushed the button.

"Why do you live far away?" I asked, as Freud. "Is there a good reason?"

Soon, I fell into a rhythm. Freud and I talked for about twenty minutes. He was insightful; he said things that I'd never said to myself, in ordinary life. When I took off the headset, I was moved. I wanted to tell myself, "Good talk." From his perspective, I'd seemed different: sadder, more ordinary and comprehensible. I told myself to remember that version of me.

I looked up to see Slater, standing with Neyret and Johnston. "I think it accesses aspects of yourself that you've repressed," he said.

"It changes completely the judgment you usually apply to your internal thoughts," Neyret said.

"It's because you're physically outside of yourself, and you see yourself and hear yourself talking," Slater said. "Your natural instinct, when you see someone in front of you describing a problem, is to help them. The fact that it's you is kind of irrelevant."

"I didn't feel like I was talking to myself," I said. "It felt like a real conversation. How can that be?"

"Maybe we can have many selves," Slater said, raising an eyebrow.

Before arriving in Barcelona, I had asked Slater and Sanchez-Vives if I might try a virtual out-of-body experience. Later that day, in another part of the lab, I sat in a chair while three researchers—Pierre Bourdin, Itsaso Barberia, and Ramon Oliva—attached small vibrating motors to my wrists and ankles. Inside the V.R. headset, I saw a virtual room, with a coffee table and a working fireplace. In the virtual mirror in front of me, I saw an unsettling image: a man in a black Velcro suit, his eyes hidden behind a black V.R. headset. This was me, as I existed in the real world.

"You'll see some shapes on the coffee table," Bourdin said. "Trace them with your feet."

I heard the clicking of a computer mouse. Shapes like hieroglyphs appeared on the table, and I traced them.

"Next, you'll see some bouncing spheres," Oliva said. The mouse clicked, and small blue spheres began dancing around my body. Thanks to the motors, I felt them, light and soft, when they touched me.

"Try moving your arms and legs," Oliva said. I did, and the spheres followed.

For a few minutes, I sat enjoying my strange surroundings. Then, without warning, my point of view began to move. I was pulling backward, out of myself. First, I saw the back of my head, and then my body from behind. I began drifting toward the ceiling. From there, I looked down at my body in its chair, surrounded by swirling spheres. In my mind, silence reigned. No thoughts were equal to the experience. I didn't feel that I had left my body; I felt that my body had left me. When I took off the headset, Slater and Bourdin were watching me. "How was it?" Slater asked.

"I don't know," I said.

"How do you feel?" Bourdin asked.

"Weird," I said.

"Some people have really strong experiences," Bourdin said. "There's shouting. They grab the chair." He paused. "I think it gives you the implicit idea that you can separate your body from your soul. It's about the fear of death."

I nodded, cradling the headset in my hands.

In Frankfurt, over lunch at a Persian restaurant, I described my virtual experiences to Metzinger. I wanted to know if they had been real. Had my virtual-reality O.B.E. been a real experience? What about the sensation of touching my jacket? Had it been real?

"It's a big question, when the word 'real' makes sense," Metzinger said. His brow furrowed. "An interesting possibility is that the whole distinction between real and unreal is misguided." He gestured toward the flame of the candle on the table between us. "In Buddhist metaphysics, there is the idea of 'emptiness.' To realize the emptiness of things is to say, 'This is neither real *nor* nonexistent.' Our perception of the candle refers to something real, in the real world. But *this* candle—the one we see—it's mental content. And yet it's also not true that the experience, the model in our minds, is unreal. It's 'empty.' 'Empty' may have been their way of saying that it's just a virtual model. 'Emptiness' could be 'virtuality.' "

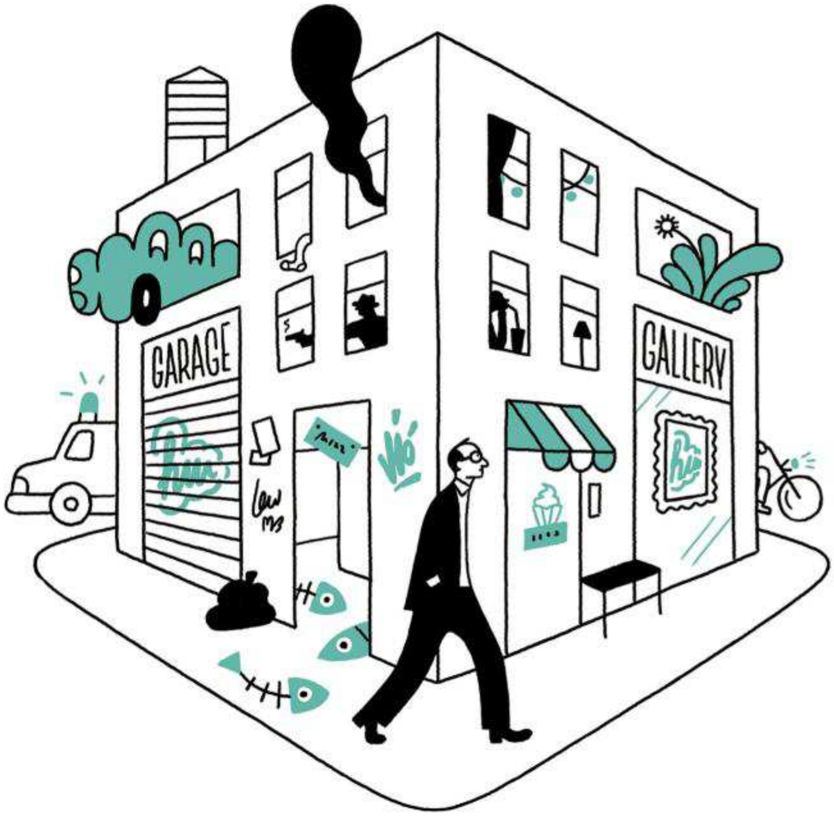
Listening, I rubbed the fabric of my jacket between my fingers. The jacket was real, as were my fingers. But the exact feeling of the jacket between them, which existed, solid but cloudy in my mind—perhaps that was empty.

Metzinger had ordered Persian coffee, and it arrived on an ornate silver tray. Between the tiny, elegant cups, nearly overflowing with coffee, were dates dusted with sugar. Our waitress gave us instructions in German. "*Danke schön*," Metzinger said. "She says to have a date, then to have a sip of coffee, because that contrasts the bitterness with the sweetness." I tried a date, brushed the sugar from my fingers, and sipped my coffee. She was right.

It was getting late, and we set out for a stroll in the park. As we walked, Metzinger wondered how virtual reality, by changing how we experience ourselves, might influence religion and art. "Could you experience your sense of self as empty?" he asked. "As in, there's no self there—no control? In my own life, I find states like this tend to have a beginning and an end." A smile broke through the severity of his expression. He laughed. "You know, the coolest thing in Mel Slater's lab—I was sitting in a room in V.R. There was a crackling fire, a big mirror. And they hadn't switched the avatar on. And I looked down, and there was no body. The chair was empty. I liked that!"

The park was still and beautiful. It had rained the night before, and the sandy paths were wet. The sun was low, and our footsteps crunched on the sand. A boy rode his bicycle through a puddle; we heard the water lapping. I felt tired and excited—full of ideas. The sky was blue. The grass was green. ♦

SHOUTS & MURMURS



LUCI GUTIÉRREZ

How the Neighborhood Has Changed

BY JACK HANDEY

Over there, in the basement of that building, there used to be a Mafia torture chamber. All night long, you'd hear yells and screams. Now it's a bar catering to college students. On that corner, there was a junk yard. Old cars were torn to shreds, and the shreds were compacted into big blocks. Today, it's an art gallery.

You used to see bums pushing grocery carts down the street all the time. And when you saw what was in a cart you'd think, Man, why is he keeping that? Today, there are lots of parents with strollers.

Over on the Hudson River, it was common to see mounds of worthless garbage go bobbing by. Now the river is full of kayakers.

The fish market is gone. And it's no great loss. The fish were very skinny and had dead eyes. Today, it's a modelling agency.

On the roof of that building there, an old man kept a bunch of pigeons. Today, the whole building is owned by Goldman Sachs.

Public urination, and even defecation, were common in that alleyway. Now it's a dog run. That store used to be Madame Xeno's Fortune-Telling Service, but it closed after the roof unexpectedly caved in.

There were lots of blaring sirens and loud motorcycles back in those days. Now there's just a constant ringing noise.

You're seeing bigger and bigger celebrities today. Years ago, I saw Paul McCartney walking down the street. Then I saw Sir Paul McCartney. And last week I saw King Paul McCartney.

Some things have stayed the same. The corner drugstore is still there, although it has since relocated to the middle of the block. Nazi Books is still open; old Gerhard still greets customers with a friendly "Heil Hitler." Locals still flock to Daylight-Mugging Park, with its famous statue of Sir Arthur Daylight-Mugging. And Whappie's still exists, although to this day no one knows what they sell or do.

But many places have succumbed to the wrecking ball, including, oddly enough, the local wrecking-ball company. People were horrified when the old Chesterton Hotel was torn down, because guests were still staying there at the time.

For the most part, the changes to the neighborhood have been for the better. Crime is down, even petty crime—at least, that's what I read in my neighbor's newspaper. In the old days, you always had to look over your shoulder, in case you were being followed by some nut. Today, you can look straight ahead, and maybe even call out to the person walking in front of you, asking him where he's going and where he got that shirt.

But I do miss some things from before. The waitress at the café would call you "sugar" or "hon," and the panhandler would call you "buddy." Nowadays, I don't think they even know your name. There are plenty of shops where you can buy a fancy, expensive cupcake, but where can you go in and have someone pull your hat down over your eyes?

One thing is certain: the neighborhood will continue to change. One day, far in the future, people will walk around with handheld "rain protectors." Taxis will zoom down the streets at breathtaking speeds, using loud sonic blasters to clear other vehicles out of the way. Strange aliens from distant worlds, with differently shaped eyes and intelligence surpassing ours, may own and operate our corner bodegas.

I hope I am around to see it. ♦

A REPORTER AT LARGE

Dirty Politics

Scott Pruitt's E.P.A. is giving even ostentatious polluters a reprieve.

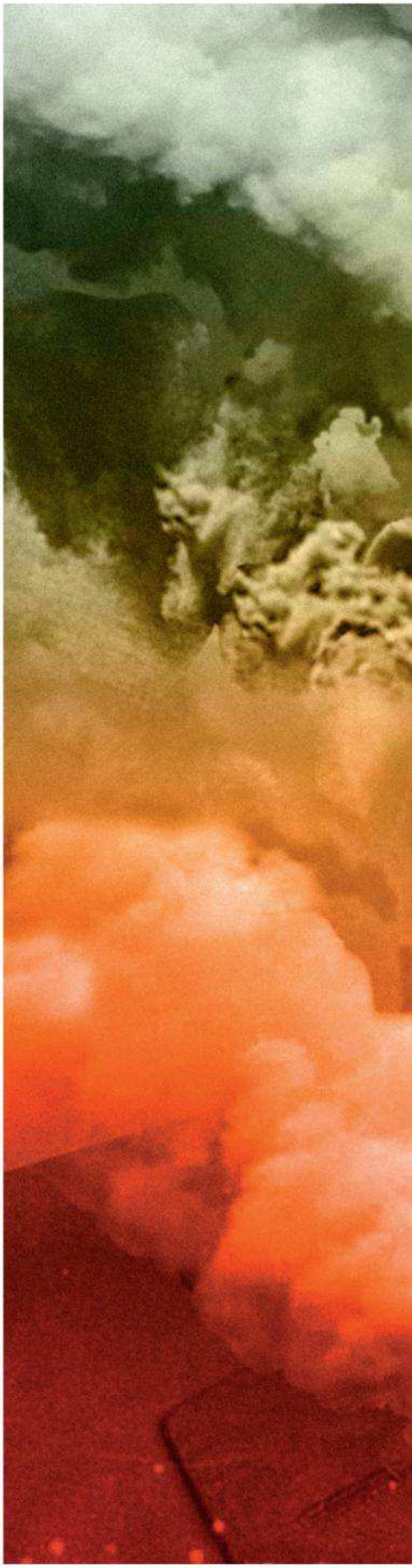
BY MARGARET TALBOT

One afternoon last April, Scott Pruitt, the administrator of the Environmental Protection Agency, travelled to the Harvey Mine, in Sycamore, Pennsylvania, to declare that the agency had a new direction, which he called "Back to Basics." It was an unusual place for the nation's chief steward of clean air, land, and water to set out a policy agenda. Consol Energy, the owner of the Harvey facility, which is part of the largest underground coal-mining complex in North America, has been fined repeatedly by the E.P.A. for violations; in 2016, it had to pay three million dollars for having discharged contaminated wastewater into the Ohio River and its tributaries. Past E.P.A. administrators have spoken of creating jobs as a welcome potential by-product of the agency's work, especially if they are green jobs, but creating or protecting energy jobs is not supposed to be the mission—protecting human health and the environment is. As the speech that Pruitt gave at the mine demonstrated, he seems to have these priorities reversed.

Pruitt, who is forty-nine, looked cheerful, as he generally does at public appearances. (He declined my requests for an interview.) Unlike many people who have joined the chaotic Trump Administration, he seems unconflicted about his new role, his ideological and career goals fitting together as neatly as Lego blocks. The former attorney general of Oklahoma, Pruitt ascended politically by fighting one regulation after another. In his first year at the E.P.A., he has proposed repealing or delaying more than thirty significant environmental rules. In February, when the White House announced its intention to reduce the E.P.A.'s budget by twenty-five per cent—one of the largest cuts for any federal agency—Pruitt made no objections. His schedule is dominated by meetings and speaking engagements with representatives of the industries he regulates. He has met only a handful of times with environmental groups.

At the Harvey mine, Pruitt wore a solid-red tie and, on his lapel, an American-flag pin; he briefly put on a white hard hat inscribed with the phrase "Make America Great Again." He delivered his remarks in a sterile, fluorescent-lit room, a contrast with the audience, which was filled with miners in coal-dusted uniforms. He spoke in a precise staccato that was softened by the light Southern accent of his native Kentucky. In the speech, which Pruitt gave before touring the mine, he said, "I'm looking forward to puttin' on those suits you've got on, goin' down, and checkin' it out and havin' *fun* doing so." He joked that whoever said you can't have your cake and eat it, too, didn't know "what you're supposed to *do* with cake." He insisted that you could, in fact, roll back regulations on industries like coal while taking care of the environment. But he did not point out that, as many economists have indicated, the availability of cheap natural gas has done more to eliminate coal jobs than environmental regulations have. (A month earlier, Bloomberg News had reported that Consol planned to sell off, or otherwise terminate, its coal businesses, in order to focus on extracting natural gas.)

It's an open secret in Washington that Pruitt would like to become Attorney General if President Trump fires Jeff Sessions, and at the E.P.A. he often sounds like he's trying out for that post, repeating a set of talking points, honed in conservative legal circles, about the dangers of "federal overreach." In Pennsylvania, Pruitt told the miners, and a contingent of corporate executives, that "the days of our agency declaring war on your industry are over." He went on, "It's not right for government to do



PHOTOGRAPH: SAUL LOEB/AFP/GETTY (MAN)

William Ruckelshaus, who ran the E.P.A.

ILLUSTRATION BY PAUL SAHRE



under Nixon and Reagan, said that Pruitt and his top staff "don't fundamentally agree with the mission of the agency."

that." Many of his comments that day sounded like rallying cries. "You guys are a *handsome* crew!" he declared. "The cavalry's on the way!"

In June, Pruitt joined Trump in the White House Rose Garden as Trump announced that the United States was withdrawing from the Paris climate accord. Although there is a consensus among scientists that human activity is causing climate change, Pruitt is skeptical of this view; unlike Trump, who has called global warming a "hoax" created by the Chinese, Pruitt expresses his dissent with deliberate mildness. Last March, he told CNBC, "Measuring with precision human activity on the climate is something very challenging to do." He went on, "I would not agree that it's a primary contributor to the global warming that we see. But we don't know that yet. We need to continue to debate, continue the review and analysis." The E.P.A., he has said, will commence a "red team–blue team" review of climate-change science that puts "experts in a room and lets them debate."

At an event hosted by the Federalist Society in November, Pruitt said, "I've been asking the question lately, 'What is *true* environmentalism?' . . . From my perspective, it's environmental stewardship, not prohibition." He added, "We have been blessed, as a country, with tremendous natural resources." Previous E.P.A. administrators, he said, had promoted an inflexible philosophy of "Do not touch."

The agency was established in 1970, by President Richard Nixon. William Ruckelshaus, its first administrator, who also led the E.P.A. under Ronald Reagan, told me, "My principal concern is that Pruitt and the people he's hired to work with him don't fundamentally agree with the mission of the agency. They seem more concerned about costs associated with regulations." Myron Ebell, a climate-change skeptic who headed Trump's transition team for the agency, praised Pruitt for concentrating on "the E.P.A.'s statutory responsibilities" and for "dropping many discretionary activities that have taken up more and more of the E.P.A.'s budget and staff time in recent years." Pruitt argues that every E.P.A. action should be specifically grounded in a federal statute such as the Clean Air Act—fifty-four-year-old legislation that was last amended in 1990.

Pruitt and his admirers call this approach "E.P.A. originalism"—a nod to the late Supreme Court Justice Antonin Scalia, and his reading of the Constitution. The idea is that Pruitt is sticking to "traditional" priorities, such as cleaning up Superfund sites and contaminated drinking-water supplies, rather than focussing on newer and broader environmental threats, such as climate change.

One problem with "E.P.A. originalism" is that neither our scientific knowledge nor the environment itself remains static. Rivers no longer catch fire, as the Cuyahoga, in Ohio, did repeatedly in the fifties and sixties; the skies over Los Angeles are no longer choked with brown smog; acid rain is no longer the threat it was to rivers, lakes, and wildlife; gasoline for cars is no longer made with lead, which damages children's brain development. This progress was achieved, in no small part, because of the discretion that the E.P.A. has used to interpret laws as new ecological challenges, and new scientific understandings, arise. Every year, advancements in toxicology, technology, and epidemiology suggest new remedies. Ruckelshaus told me that it is self-defeating to insist on binding all environmental policy to the science of the past. He said, "We've cleaned up a lot of pollution—the air is much better, though we have three times the number of autos on the road. While you see pictures of Beijing—that doesn't happen here anymore. Americans have the impression that because the smell-touch-and-see kind of pollution is gone, or not as intense, that we've dealt with the problem for good. But the environment is something you have to stay everlastingly at. Or it gets worse again."

Under Pruitt, even the dirtiest forms of pollution are getting a reprieve. On February 2, 2014, as much as thirty-nine thousand tons of coal ash began spilling into the Dan River from a Duke Energy power plant in Eden, North Carolina. Like many utilities, the Dan River Steam Station had recently transitioned from coal combustion to natural gas, which is cheaper. But the plant still had waste ponds containing more than a million tons of coal ash; the ponds were separated from the river by an earthen dam. When a guard made his rounds that day, he noticed that the water level in the ponds was rapidly dropping, as though someone had opened a bathtub drain.

A sixty-year-old pipe leading under the ponds to the river had collapsed. By the time Duke Energy engineers sealed the pipe, nearly seventy miles of the Dan River had been fouled with coal ash laden with arsenic, lead, mercury, and selenium. The river, ordinarily a greenish-brown color, now resembled milky tea, and a drab sludge slathered its banks. Amy Adams, an organizer with a group called Appalachian Voices, who went down the river in a kayak after the spill, recalls navigating through "oozing sandbars of slag." The Dan provides the drinking water for half a dozen communities in North Carolina and Virginia. According to the E.P.A., pollutants in coal-ash wastewater can cause "severe health and environmental problems in the form of cancer and non-cancer risks in humans, lowered I.Q. among children, and deformities and reproductive harm in fish and wildlife."

Coal ash is one of the most prevalent forms of industrial waste. Although it can be recycled to make concrete and other products, or stored in landfills far from waterways, it is more typically mixed with water to create a slurry, then sluiced into holes in the ground. The holes are often unlined and adjacent to rivers, because steam electric plants need to be near bodies of water. Frank Holleman, an attorney with the Southern Environmental Law Center, said, "It's about the most primitive way you can imagine to deal with industrial waste."

The Dan River spill was the result of neglect: Duke Energy engineers had recommended installing video cameras, at a cost of twenty thousand dollars, to monitor pipe corrosion, but they were ignored. In 2015, Duke Energy subsidiaries pleaded guilty to nine misdemeanor violations of the Clean Water Act, including the unlawful discharging of coal ash, and paid a sixty-eight-million-dollar criminal fine, plus thirty-four million to fund environmental conservation.

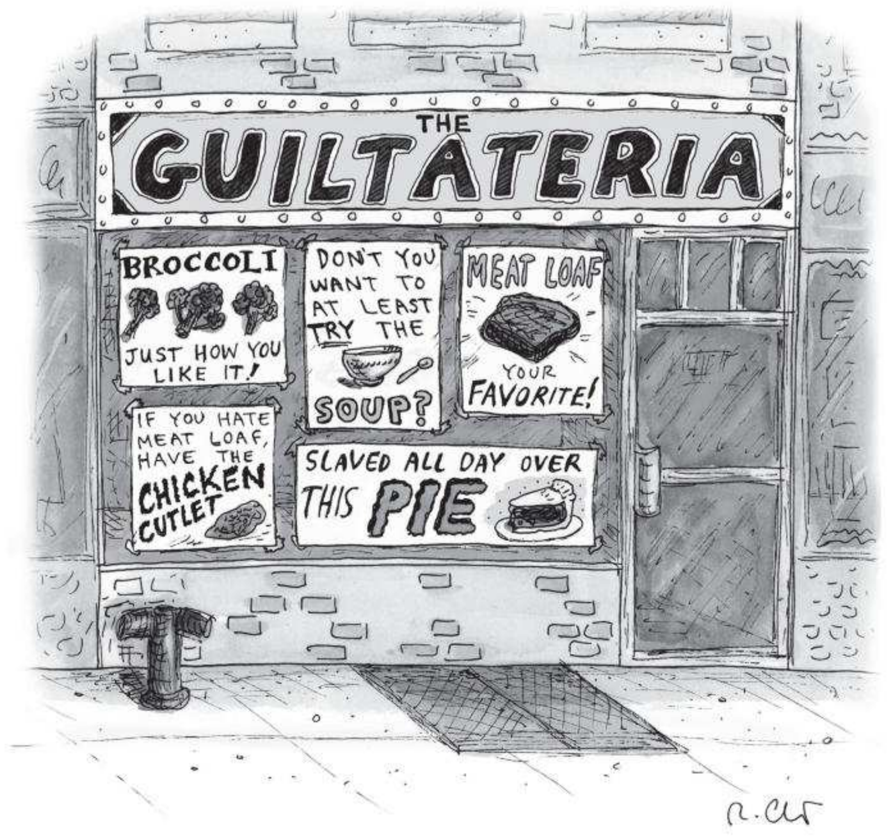
Other coal-ash ponds have caused even bigger calamities. In 2008, a dike at a Tennessee Valley Authority power plant gave way, releasing more than a million tons of coal ash, and contaminating two rivers. The T.V.A. has spent about a billion dollars cleaning up the mess. Kenneth Kopocis, a former senior E.P.A.

official, told me that it was hard to think of a more foolish policy than allowing coal-ash ponds to remain next to rivers: "They *are* going to fail. And when they do they create disasters that imperil drinking water and human health, and cost hundreds of millions of dollars to clean up." Even when coal-ash ponds don't fail spectacularly, they leak toxins into groundwater. Avner Vengosh, of Duke University, uses geochemical tracers to help identify coal-ash contaminants, and a research team led by him has found evidence of leaking in all twenty-two ponds that it has examined.

Recent technological changes have caused the wastewater produced by coal-fired power plants to become even more toxic. Some of the worst wastewater is discharged by "wet scrubbers," which remove pollutants from smokestack emissions. Holleman, the attorney at the Southern Environmental Law Center, said, "I like to say they're using twenty-first-century technology to take pollutants out of the air and thirteenth-century technology to put it in the water. But someone told me I was insulting the thirteenth century."

Coal-fired power plants are often found in rural, low-income areas, some of which rely on private wells. Walnut Tree is a predominantly African-American community near another Duke Energy power station in North Carolina. For years, coal ash from the Belews Creek Steam Station fell like snow on the town's modest houses and back-yard vegetable gardens. Kids wrote their names in the ash that blanketed their parents' cars and corroded the paint. David Hairston, a Walnut Tree resident turned activist, told me, "A lot of these people can't afford to move. The resale value is no good." A 2007 study prepared for the E.P.A. found that people living near coal-ash disposal sites face an increased risk of developing cancer.

Although utility companies know that coal-ash ponds pose enormous liability risks, they often delay removing them until they are sued by environmentalists. Last summer, after one such lawsuit, a federal district court ordered the T.V.A. to remove the ash from an unlined four-hundred-and-seventy-six-acre pond adjacent to the Cumberland River. Judge Waverly Crenshaw declared that the T.V.A. must stop covering over "decades-old mistakes." (The T.V.A., appealing the decision, has proposed to do just that: cover the pond with concrete.)



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Although Pruitt argues that the E.P.A. has become too hasty and radical in its responses, it agonized over the coal-ash problem for years, to the point that environmental groups sued it for inaction. In 2014, the agency finally issued a regulation—one that was hardly extreme. Kopocis, the former E.P.A. official, said that the agency "worked very hard to listen to industry's concerns." The rule did not mandate that power-plant operators close coal-ash ponds (though it specified how this could be done safely). Instead, it laid out requirements for lining them, monitoring groundwater, and conducting structural-stability assessments. E.P.A. regulators did not classify coal ash as hazardous waste, a step that would have triggered stricter policy, largely because they wanted to make it easier for power companies to sell the ash for recycling. The new rule didn't apply to ponds on sites where power was no longer being produced, even though they are just as likely to leak, and it was "self-implementing," meaning that if companies didn't comply the only redress was a lawsuit.

"The rule was *very* weak," Peter Harrison, an attorney with Earthjustice, a conservation organization, said. "Still, this industry was so far above the law that there were no federal regulations at all before 2014. It was left to states, and many of them went out of their way to exempt coal ash from their rules. In that sense, it was an improvement." Frank Holleman told me, "E.P.A.'s rule wasn't the most stringent, but at least it established some minimum national standards." He went on, "Utilities are the most powerful political force in the state capitals, so state enforcement agencies are always very reluctant to require them to do anything."

In 2015, a much stronger regulation, the Effluent Limitations Guidelines rule, set new caps on the amount of toxic metals and other harmful contaminants that coal-fired steam electric power plants could sluice into ponds or discharge into waterways. (Under the Clean Water Act, plants can apply to the E.P.A. for permits to discharge some wastewater.) These limits hadn't been revised since the early eighties, and advances in water treatment had made it much easier, and cheaper, to extract toxic metals. Elizabeth

Southerland, who worked on the Effluent Limitations Guidelines, served in the E.P.A.'s Office of Water until July, when she resigned. She told me that power plants that adopted new extraction technology could drain coal-ash ponds for a relatively low cost, by treating the pond water, jettisoning the liquid, and sending the remaining ash to landfills or recycling centers. "This was a classic case where addressing pollution at the source is orders of magnitude less expensive than dealing with it once it's been released into the environment," Southerland said. The E.L.G. rule gave power companies eight years to comply. The industry might not have been enthusiastic, but it was prepared.

Companies also had a financial incentive: demand for recycled coal ash was high. Because there are few such recycling facilities in the U.S., concrete manufacturers have been importing coal ash from China, India, and Poland. A recent report from the Carolinas Ready Mixed Concrete Association concluded that the market "was greatly underserved." Duke Energy is storing more than a hundred and fifty million tons of coal ash in North Carolina alone. Building new recycling facilities could create new jobs.

Trump, in his campaign, promised to rebuild the coal industry. At one point, he told Fox News' Chris Wallace that he planned to eliminate what he'd once called "the Department of Employment Prevention," saying, "We're going to have little tidbits left, but we're going to take a tremendous amount out." Soon after Pruitt became the head of the E.P.A., he announced that the agency would "reconsider" the E.L.G. rule. He said that he was "implementing President Trump's vision of being good stewards of our natural resources, while not developing regulations that hurt our economy and kill jobs."

In September, Pruitt responded to petitions from a lobbying organization, the Utility Solid Waste Activities Group, and a power company called A.E.S. Puerto Rico, which complained that even the weak 2014 coal-ash rule was causing "adverse impacts on coal-fired generation," because of "the excessive costs of compliance." Pruitt agreed that it was "in the public interest" to reconsider the 2014 rule as well.

On March 1st, Pruitt announced a proposal for a new coal-ash rule that would supplant all Obama-era regulations. An agency announcement promised that this approach would "save the utility sector up to a hundred million dollars per year in compliance costs." Among other changes, Pruitt's rule allows each state to decide how companies must remediate spills and leaks, how often they must test for groundwater contamination, and where they may place coal-ash ponds. Pruitt said that the new rule allows states to "incorporate flexibilities." The rule added boron to the list of chemicals that must be monitored, which pleased environmentalists, but Southerland told me that the other changes effectively undermined "all the protective processes in the 2015 rule," because "most states will undoubtedly choose" weaker standards. Even worse, the agency's detailed proposal for the new rule states that it also plans to consider allowing power plants to implement their own compliance programs, which would operate "without the intervention of a permitting authority."

No wonder the mood at a recent meeting of the American Coal Ash Association, in Sarasota, Florida, was so upbeat. The luncheon speaker was Alex Epstein, an Ayn Rand devotee who runs a think tank called the Center for Industrial Progress. His talk, "The Moral Case for Fossil Fuels," ran long, but the audience didn't seem to mind. People laughed appreciatively when he showed a video of himself wearing an "I ♥ Fossil Fuels" T-shirt at a climate-change march in New York City. Lisa Evans, an Earthjustice attorney, attended the conference. "The atmosphere was confident to the point of snarkiness," she said. "It was, like, 'We are getting a new rule, and we wrote the playbook for the E.P.A. on it.'"

Pruitt was not an early enthusiast for Trump. He advised Jeb Bush in the primaries, and in a February, 2016, radio interview—recently discovered by a watchdog group called Documented—he said of Trump, "He has tendencies that we see in emerging countries around the world, where he goes to the disaffected, those individuals, and says, 'Look, you give me power and I will give voice to your concerns.' And that's a dangerous place to be." Trump, he added, would be "more abusive to the Constitution than Barack Obama."

For Pruitt, this was saying something, because after being elected Oklahoma's attorney general, in 2010, he had spent much of his time battling Obama. In 2014, George F. Will described Pruitt, admiringly, as "one of the Obama Administration's most tenacious tormentors." A year later, the magazine *Governing* noted, "Whenever states go to court against the Obama Administration, the chances are that Pruitt is somehow involved."

Scott Pruitt was born in Danville, in central Kentucky, and grew up in Lexington. His father owned steak houses, and his mother was a homemaker. He graduated from a small Christian school in Kentucky, Georgetown College; in 1990, he moved to Oklahoma to attend law school, at the University of Tulsa, and stayed on after getting his degree. Oklahoma voters first got to know him as a state senator from Broken Arrow, a Tulsa suburb. He served two terms, and was a member of the American Legislative Exchange Council, or ALEC, a conservative organization that drafts model legislation, with backing from Koch Industries and other corporate donors. In 2003, he told *Governing* that ALEC "puts legislators and companies together, and they create policy collectively."

Kenneth Corn, a former Democratic state senator who served alongside Pruitt, described him as "very ambitious, and always sort of running for something else." Pruitt was firmly opposed to abortion, and a leader in a Republican effort to put limits on workers' compensation. He sponsored a bill that would require drug tests for workers who suffered on-the-job injuries or accidents resulting in damage to an employer's property. Workers'-compensation reform didn't pass until the Republicans took over the State Senate, in 2008, after Pruitt had moved on. Still, Corn said, "Scott helped shape the Republican message on that issue. And it helped him raise money later."

In 2003, after an unsuccessful run for Congress, Pruitt bought a share in a Triple-A baseball team, the Oklahoma City RedHawks. To buy the RedHawks, Pruitt—at that time a thirty-five-year-old state senator with a salary of $38,400—

HOW FOREVER WORKS

The soft tick of snow
landing in its own body—
what was left of time.

It then took every voice
to the ground with it.
In a way it listened to me
but also took me down.

However the world
remembered us,
it did so quietly, inside
a dying memory. Love me

anyway.

—*C. L. O'Dell*

partnered with Robert Funk, the founder of an employment-agency company and a prominent Republican donor. Pruitt and Funk bought the RedHawks for a reported $11.5 million, breaking the record for a minor-league team, and sold it in 2010, for an undisclosed profit.

As a co-owner of the RedHawks, Pruitt frequently showed up on local media to promote the team. He and his wife, Marlyn, lived with their children, McKenna and Cade, in Broken Arrow, where they belonged to the First Baptist Church, a congregation with its own YouTube channel and live-streaming services. Politico recently reported that in 2005, when Pruitt was interviewed by a Tulsa radio station, he remarked that there weren't "sufficient scientific facts to establish the theory of evolution."

Keith Gaddie, a political scientist at the University of Oklahoma, said that in those years Pruitt was "a very positive, guy-next-door type." But in 2010 he ran for attorney general as a "hard-edged, Tea Party-type guy." Pruitt cast himself as a warrior for state sovereignty, and as a champion of religious liberty. He liked to talk about a 1997 trip that he'd taken to Romania, on a Baptist mission. He'd learned that, under Communism, Christians had been free to worship in churches, but not elsewhere in public. Such oppression was imminent in this country, he warned. His campaign literature cited liberties that he would uphold: the right "to be born," to keep and bear arms, to decline health insurance, to "drive a car different than the one Washington thinks you should drive," and to reject "confiscatory environmental regulations based on junk science." When he spoke at a 2014 ALEC meeting, he looked genial as he stood at the lectern and peered over his reading glasses, but his rhetoric was martial: thanks to Obama Administration regulations, Pruitt told the audience, Americans were "in the midst of a constitutional crisis."

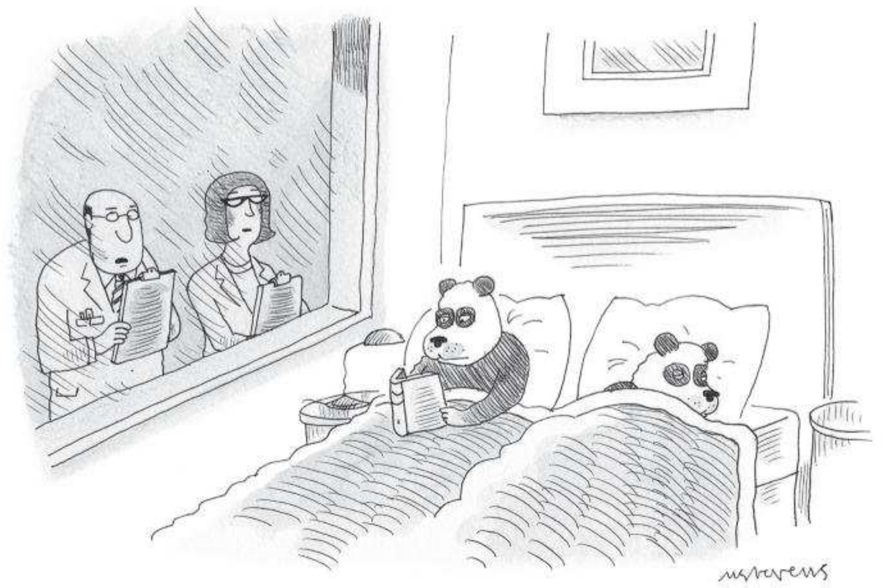
These aggressive stances resonated in deep-red Oklahoma, and he handily defeated his Democratic opponent. Pruitt was reëlected four years later, and he began building a national profile. He was twice elected president of the Republican Attorneys General Association, an organization that attracts corporate donations from ExxonMobil, the American Petroleum Institute, and other entities that he is now in charge of regulating at the E.P.A.

He created a new "federalism unit" in the attorney general's office, intended to combat "systemic overreach" by the federal government. As attorney general, he was notably litigious, but in his most high-profile lawsuits he did not often prevail. In 2015, he defended the placement of a monument to the Ten Commandments on the statehouse grounds. The Oklahoma Supreme Court ruled against Pruitt, by a 7–2 vote. Brady Henderson, the A.C.L.U. attorney who argued the other side of the case, recalled that Pruitt borrowed the "scripts of conservative think tanks." Henderson continued, "They kept fighting the challenge as though it were an atheist or an agnostic who was suing, and as though it were a First Amendment case. But our lead plaintiff was a Baptist minister!"

On other occasions, Pruitt lost when he set aside his commitment to state sovereignty. In 2014, Oklahoma joined five other farm states to challenge a California law requiring that eggs sold there come from chickens kept in cages big enough to let them extend their wings. Pruitt disparaged the law, saying, "It's almost like having a cage that's air-conditioned, and they can do yoga." A district-court judge in California dismissed the lawsuit. In 2016, the U.S. Supreme Court declined to hear a case that Pruitt and Nebraska's attorney general, Doug Peterson, had brought against Colorado for legalizing marijuana. The Justices offered no comments, but it seems likely that the majority didn't see how the law was Oklahoma's or Nebraska's business, even if they are Colorado's neighbors.

In 2011, Pruitt filed a lawsuit challenging the Affordable Care Act, relying on arguments about states' rights generated by the Cato Institute. He got a favorable ruling from a district court in Oklahoma, but the Supreme Court upheld the law. However, in February, 2016, Pruitt shared in a noteworthy success at the Supreme Court. In a 5–4 decision, the Justices issued a stay on enforcing the Clean Power Plan, siding with Pruitt and twenty-eight other state attorneys general (and dozens of industry lawyers). The Clean Power Plan, championed by Obama, requires states to cut greenhouse-gas emissions from electric power plants—the largest source of such emissions. Pruitt and other opponents argued that the law was based on an overly expansive reading of the Clean Air Act. As the E.P.A. administrator, Pruitt has promised to repeal it.

In general, though, Pruitt's track record in suing the E.P.A., which he did fourteen times, was spotty. When the agency rejected Oklahoma's plan for reducing emissions of sulfur dioxide, a component of smog, because it wasn't stringent enough, Pruitt sued, contending that the E.P.A. had usurped Oklahoma's



"Well, this is getting us exactly nowhere."

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authority. An appellate court ruled against him, and the Supreme Court declined to hear the case. Half of the legal actions that Pruitt joined against the E.P.A. have been either dismissed on jurisdictional grounds or declined on substantive ones. Several of the lawsuits are ongoing. (He has recused himself from lawsuits against the agency in which Oklahoma is involved. Two of them are named "Oklahoma ex rel. Pruitt v. E.P.A.")

Pruitt knew that the odds were against him: courts generally defer to federal agencies and their expertise. But even legal defeats could serve his political ambitions. David Blatt, the head of the Oklahoma Policy Institute, said, "In Oklahoma from 2008 to 2016, the antipathy toward the Obama Administration was so great here that just by saying you were standing up to the Administration it was going to be a victory."

In suing the E.P.A., Pruitt and other state attorneys general usually partnered with industry litigants. Many of the corporations involved—such as Murray Energy and Southern Company—had donated to his campaigns or to affiliated super PACs. The co-chair of Pruitt's 2014 reëlection campaign was Harold Hamm, the billionaire C.E.O. of the oil-and-natural-gas company Continental Resources.

In Oklahoma, Pruitt's obeisance to the energy industry was sometimes startling. Four years ago, Eric Lipton, of the *Times*, revealed that a letter Pruitt once sent to E.P.A. regulators, complaining that they had overestimated how much pollution new oil wells were producing in Oklahoma, had been copied, nearly word for word, from a draft supplied by Devon Energy. William F. Whitsitt, who then directed government relations at Devon, praised the letter as "outstanding."

When Pruitt came to the E.P.A., he broke with agency practice by refusing to release his schedule in advance or his calendar of meetings after the fact. In response to scores of lawsuits brought by environmental and government-transparency groups, he gave in—a bit. He began posting a calendar online, but it generally did not divulge the subjects of his meetings or the names of attendees. Even this partial view of his schedule, however, revealed how radically Pruitt had tilted in a business-oriented direction. The administrator's traditional array of meetings with environmental or public-health groups had been almost entirely replaced by speeches to corporate groups, such as the Louisiana Chemical Association, and private meetings with representatives of fossil-fuel companies and other regulated concerns. (Pruitt has withheld the text of these speeches.)

In private meetings, Pruitt had many opportunities to hear about how coal-ash regulations were irking some energy companies. On March 9, 2017, Pruitt met with Lynn Good, the C.E.O. of Duke Energy, at a Hilton hotel in Houston, to talk about "Duke Energy's policy priorities." In April, he had lunch at Equinox, a Washington restaurant, with executives from Alabama Power. In May, a month after Pruitt announced that the agency would reconsider the 2015 Effluent Limitations Guidelines rule, he had a call with Good to discuss coal ash. Immediately afterward, he met with another coal executive, and then with the Congressional Coal Caucus. Pruitt's decision to "reconsider" the 2014 rule soon followed.

William Reilly, the E.P.A. administrator under President George H. W. Bush, told me, "I had a good reputation with industry—I was on the board of DuPont after E.P.A. But you're supposed to meet with *everybody*. And to not know what environmentalists are signalling as problems—that's unwise. Industry is unlikely to be the source of information about developing environmental problems."

Elizabeth Southerland, the E.P.A. official who helped write the Effluent Limitations Guidelines rule, tried to talk to Pruitt and his political staff about her thinking. She found the experience bewildering. By the time she and her team briefed Pruitt, he had already put out a press release deriding the regulation as "costly." Still, she had hope. Career E.P.A. employees tend to be data-oriented types with a sometimes naïve belief in the persuasive powers of science. "He did not tell us what he was hearing from industry," Southerland said. "He did not debate with us, or indicate any leaning one way or another. He just sat there." She went on, "In the past, administrators would say, 'I'm hearing from this industry this or that,' and then you could rebut it or say, 'I have to get back to you.' But we could never really get a feel in all this briefing process for *why* he must not be believing what we were saying."

It's not surprising that Trump's E.P.A. has targeted Obama-era initiatives and rules with the word "coal" in them. But some Pruitt rollbacks don't seem to fit into any broader conservative agenda:

they don't grant significantly more discretion to the states, or seem likely to create many jobs. They seem like favors to specific industries or companies.

In November, Pruitt proposed the repeal of an Obama-era rule that imposed Clean Air Act emissions standards on glider vehicles—heavy-duty trucks that pair new cabs and chassis with older, dirtier engines. Gliders are slightly cheaper than all-new trucks, in part because they aren't equipped with modern pollution controls. They make up only five per cent of the heavy-duty-truck fleet, but they emit a disproportionate amount of dangerous pollution. Steve Silverman, a former E.P.A. attorney, who retired in January, worked on the glider rule. "We're not talking only about greenhouse gases," he said. "These trucks put out diesel particulate matter, a human-lung carcinogen." In 2016, an agency analysis concluded that gliders produce almost three hundred thousand tons of nitrogen-oxide pollution a year, along with nearly eight thousand tons of diesel-particulate pollution. Agency scientists estimate that a single year of glider pollution causes as many as sixteen hundred premature deaths.

At a public hearing in December, environmental and public-health groups such as the American Lung Association sent representatives to speak for keeping the rule. That was expected. But so did Volvo Group North America, which produces both Volvo and Mack trucks. Susan Alt, Volvo North America's vice-president of public affairs, testified that the proposed repeal "makes a mockery of the massive investments we've made to develop low-emission-compliant technology." The American Trucking Association also testified against a repeal. Bob Nuss, whom the association named the 2017 Truck Dealer of the Year, flew at his own expense from Minnesota to Washington, D.C., to attend the hearing. Nuss said, "I told them, 'Maybe it's only five per cent of the trucks, but how would we all feel if five per cent of the trucks didn't have to stop for a school bus or obey the speed limit?' Sneaking around, avoiding emissions compliance, filling the air with soot—it's just not right."

The strongest support for rescinding the rule comes from the largest producer of gliders, Fitzgerald. Last year, Fitzgerald, which is based in Tennessee, hosted a campaign event for Trump. In May, Pruitt met with the company's founder and C.E.O., Tommy Fitzgerald. Two months later, Fitzgerald and two glider dealers wrote a letter to Pruitt contending that the agency lacked the authority to regulate gliders under the Clean Air Act, because "the engine, transmission, and typically the rear axle" are "not new."

Pruitt soon announced that the E.P.A. would reconsider the rule, and precisely echoed Fitzgerald's claim that gliders fell into a regulatory gray area because they contained "new and used" components. Silverman, the former E.P.A. attorney, said that this is "just wrong." In the Clean Air Act, Congress defined a "new motor vehicle" as one for which the title "has never been transferred to an ultimate purchaser." Moreover, Silverman said, "the E.P.A. has explicit authority to regulate emissions from rebuilt diesel engines."

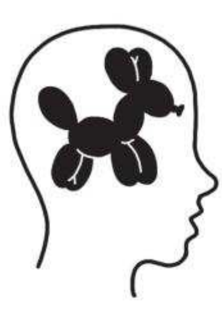
Pruitt's rollbacks have already been contested in court. The Trump Administration's favored shortcut—suspending the enforcement of a rule while it's being "reconsidered"—is proving vulnerable to challenges. In June, 2016, Gina McCarthy, Obama's second E.P.A. administrator, issued a rule, under the Clean Air Act, requiring energy companies to fix any leaks—or, in the poetic regulatory language, "fugitive emissions"—of methane, a greenhouse gas. An industry alliance petitioned for reconsideration. On June 5, 2017, two days after companies were supposed to begin monitoring methane leaks, Pruitt announced that the E.P.A. would be reconsidering aspects of the rule, and would stay enforcement for ninety days. On June 16th, the agency announced that it would extend that stay for two years, and "look broadly at the entire 2016 rule." Six environmental groups filed suit, arguing that all the industry groups' complaints "*actually were* raised (and extensively deliberated) during the comment period."

It's not uncommon for a new President's Administration to try to freeze enforcement of rules put in place by an outgoing one. But such delays have usually lasted only a month or so, according to Rena Steinzor, a University of Maryland law professor who studies the practice. Pruitt's delays are uncommonly long, she said, and he generally doesn't give "credible reasons why changes are necessary."

Federal agencies are supposed to abide by the Administrative Procedure Act of 1946, to insure that the work informing new regulations is transparent, reasoned, and not overly politicized. Bethany Davis Noll, an environmental lawyer at the N.Y.U. Institute for Policy Integrity, said, "It's also so you don't have agencies turning on a dime in response to an election." Courts hold agencies to the "arbitrary and capricious" standard: to rescind a regulation, they must demonstrate sound reasoning tied to a factual record.

William Buzbee, a professor at the Georgetown University Law Center, pointed out that the 1946 law protects businesses, too: "Oftentimes, industries have invested in new technology and practices already, figuring out ways to do well under a new regime. So unsettling business expectations is a huge cost. *One* company might like it, but that doesn't mean it's good for American business or the economy over all."

In July, the Court of Appeals for the Washington, D.C., Circuit ordered the E.P.A. to lift its stay on the methane rule. An agency can reconsider regulations, the court said, but must enforce them while doing so.



The following month, Pruitt backed off a decision to stay a 2015 regulation on ozone, after sixteen states sued the agency. Court challenges brought by environmental groups or states are pending on several other stays, and seventeen states have filed suits over his intention to rescind the Clean Power Plan. It seems likely that Pruitt's E.P.A. will lose at least some of these cases. But, even if Pruitt must reinstate several rules, he'll have rewarded certain key industries—and Trump constituents—by allowing them to postpone installing potentially costly new technologies, and to keep polluting in the meantime.

A willingness to fight in court also allows Pruitt to project decisive vigor, a

quality that he associates with the President. In an October interview with the Daily Signal, a Web site of the Heritage Foundation, Pruitt said that Trump was "full of action," adding, "He wants results. That's what the American people want. . . . That's what he's done his whole life. I seek every day, and I mean this sincerely, to bless him. I want to bless him and the decisions he's making."

Pruitt may parrot Trump's views, but he has a far more polished manner. In public appearances, he's well spoken and unflaggingly polite. When conservative journalists prod him to snipe at the E.P.A.'s "lifelong bureaucrats," he chuckles and declines the bait. In an interview with a Fort Worth radio station, Pruitt described the E.P.A.'s career employees as "hardworking folks" who, in the Obama years, had lost "their mission." He told the Daily Signal that he was talking to career employees about "the rule of law and process and federalism," but emphasized that he was listening to them, too.

As administrator, Pruitt has become adept at presenting his views with bland jargon. He defends his frequent meetings with industry representatives as time spent with "stakeholders who care about outcomes." (And he describes them as "farmers and ranchers," not as "fossil-fuel lobbyists.") He touts "fuel diversity," explaining, "It's not the job of the E.P.A. to say to the utility company in any state of the country, 'You should choose renewables over natural gas or coal.' . . . We need more choices, not less." And Pruitt has adopted a favored term of the anti-regulatory right, "coöperative federalism": putting more of the onus for environmental rule-making and enforcement on states.

Many E.P.A. employees told me that they'd been engaging in coöperative federalism for years. John O'Grady, the president of the union that represents agency workers, said, "We're *partners* with states, tribes, municipalities. We provide them with enforcement and funding, and we sometimes act like the gorilla in the closet when needed—when a state is negotiating with resistant parties." But, he added, "most of the states are operating under budget constraints—they *can't* do it on their own." William Ruckelshaus, the former E.P.A. administrator, doubts that states could assume much more responsibility for environmental protection. "That's where E.P.A. came from in the first place," he said. "I started out in environmental government, in Indiana, and we had a few very weak statutes. But states were competing for industry. Governor Wallace took out ads in the Indianapolis paper, saying, basically, 'Come on down to Alabama—we don't care *what* you put in the water!'" Ruckelshaus continued, "The state programs are more powerful now, because they have federal backup. You don't want to dismantle this—we'll be back where we started, with a race to the bottom."

Pruitt's performance has been so skillfully calibrated that the rumors he might be named Attorney General—even if he's stoked them himself—seem plausible. It's also been said that he might return to Oklahoma to run for Jim Inhofe's Senate seat in 2020. (Inhofe, a flamboyant climate-change denier who once brandished a snowball on the Senate floor to demonstrate that the planet couldn't possibly be getting warmer, is eighty-three.) Pruitt's relentless promotion of the American fossil-fuel industry—he recently travelled to Morocco to promote exports of liquefied natural gas—might well help him raise money for a Senate bid, or for a Presidential run in 2024.

For all his dad-next-door affability, Pruitt has been more secretive and security-conscious than previous administrators, in ways that have left career staffers feeling alienated. He has a round-the-clock security detail—the first E.P.A. administrator to have one. He has installed a soundproof phone booth in his office, at a cost of forty-three thousand dollars. Longtime employees told me that it has become extremely difficult to enter the administrator's office. In December, *The Hill* reported that the E.P.A. had paid three thousand dollars to a security firm to "sweep for covert/illegal surveillance devices." Pruitt told Bloomberg News that these measures had been dictated by threats against him and his family. He recently came under criticism for flying first class; the Administration defended him by citing "extremely rude" comments from economy-class passengers, including an individual at the Atlanta airport who had yelled, "Scott Pruitt, you're fucking up the environment!"

Former and current E.P.A. employees told me that the tightened security has contributed to a tense atmosphere. One employee said that she'd been sharply reprimanded after a security camera caught her in a trivial act of rebellion—turning around a poster that touted Pruitt's "Back to Basics" campaign. She had been offended by the poster's implication that "we hadn't been fulfilling the agency's mission all these years."

On March 28, 2017, when Trump came to E.P.A. headquarters to announce that his Administration would overturn Obama-era regulations on greenhouse-gas emissions, the staff received an e-mail with the subject line "Our Big Day Today." To many staffers, it sounded like jeering. Michael Cox, an E.P.A. climate-change adviser, quit four days later, after writing a letter to Pruitt: "Who is 'our' referring to? Was it the many E.P.A. career staff that worked for years developing the work that was rescinded or revoked?"

It later emerged that Cox was one of dozens of E.P.A. employees being monitored by Allan Blutstein, a lawyer for Definers Public Affairs, an opposition-research firm with conservative clients. Blutstein submitted Freedom of Information Act requests for all of Cox's work correspondence. (*Mother Jones* reported that the E.P.A. had also contracted with Definers to perform "media monitoring" services. The agency subsequently cancelled the contract, which was worth a hundred and twenty thousand dollars.) Cox said of Definers' work, "It seemed kind of petty to go after a low-level bureaucrat like me."

Christine Todd Whitman, the Republican former governor of New Jersey, served as E.P.A. administrator from 2001 to 2003, under George W. Bush. "The morale at the agency now is not good," she told me. "The private telephone booth? There's a secure facility elsewhere in the building already. This conveys the message 'I'm talking all the time about things you can't know about.' It's a collaborative agency—you need to interact with career staff. Are there tree huggers at the agency who didn't vote for Trump? Uh, yes. I can tell you, there were a whole lot who didn't vote for George W. Bush. But, as long as they

believed you wanted to protect human health and the environment, they were with you, even if you wanted to go about it a different way."

A former senior legal staffer told me, "It's been such a big hit on morale, the politicals not asking us questions—'What's it going to mean if this regulation doesn't go into effect? We want your experience to be part of the decision.' For career staff, it's a dilemma. If you haven't been asked, and you speak up anyway—'You're going to lose in court if you try this,' 'The public is going to react negatively'—that can easily translate into 'Don't talk to this person anymore.'"

Others spoke about senior managers telling subordinates that, in order to protect grants and other programs, they should expunge such words as "climate change" from the paper trail. And staffers found that the word "sustainability" aroused suspicion among Trump appointees. A senior staffer said, " 'Climate' doesn't surprise me, but 'sustainability'? That's a term that's used broadly, across countries, industries, communities." The staffer noted, "I worked on the same issues under the Bush Administration. There was a lot more emphasis on industry-government partnerships, but everybody got it on sustainability."

Soon after Trump took office, environmentalists started worrying that climate-change information would be purged from government Web sites. A group of researchers formed the Environmental Data & Governance Initiative, in part to track any such alterations. So far, these haven't been comprehensive. If you type "E.P.A." and "climate change" into Google, you can still find a lot of valid information, but many blunt statements about global warming ("The science is clear—greenhouse-gas emissions from all sources must decrease") have been deleted. An E.P.A. program called Climate Ready Water Utilities has been renamed Creating Resilient Water Utilities.

Pruitt clearly ordered many of these language changes. On April 28th, the day before the People's Climate March in Washington, D.C., anyone searching E.P.A. pages for information about climate change found the message "This page is being updated." A search for the Clean Power Plan redirected users to a page titled "Complying with President Trump's Executive Order on Energy Independence." An e-mail thread that was subsequently released, in response to a FOIA request by the Environmental Defense Fund, shows that Pruitt requested these changes. (On April 5th, a senior adviser to Pruitt, Lincoln Ferguson, had e-mailed another adviser, "How close are we to launching this on the website? The Administrator would like it to go up ASAP.")

Renée Dagseth, who worked on the program that informed communities about toxic leaks, left the E.P.A. last summer. "Senior career management seems to be frozen out of decision-making," she said. "We're trying to do the work while waiting for the floor to drop out. And to be led by people who have made it really clear that they don't have respect for that mission is demoralizing. And I think intentionally so. The plan for 'red' and 'blue' teams to debate climate change? This isn't some game show! We're talking about the survival of the planet."

Another senior staffer noted, "People have different approaches: Do you ride it out? Wait till you have some really hard evidence on something very political? Most people have a red line. You have to have that line at the front of your mind now. You have to be thinking, What am I going to do? Put it in writing? Go to my manager? Walk away, lose my job?"

Others talked about the unease of sitting at their desks with less and less to do. In August, a report by the nonpartisan Environmental Integrity Project showed that Trump's E.P.A. was pursuing significantly fewer enforcement cases against companies for violating pollution laws. John O'Grady, the union president, told me, "Enforcement action keeps people honest. It's like cops on the highway—they can't stop everybody who's speeding, but if you know they stop some people you slow down. Also, if they're not out there doing inspections, we're not generating data about industries. I don't think this Administration would get rid of E.P.A.—there would be too much of an outcry—but they could muzzle it enough that it will be there but *not* there."

Other E.P.A. employees said they were upset that Pruitt has suspended a long-standing practice at the agency: settling deadline lawsuits. The statutes undergirding E.P.A. policies—the Clean Air Act, the Clean Water Act,



"I ask you, are these the salmon trousers of a sane man?"

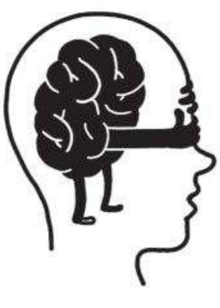
and the Toxic Substances Control Act—typically set out time frames for making rules or taking action. The agency often doesn't meet these deadlines, because it tends to move painstakingly and solicits commentary from industries, environmentalists, and the general public. Anyone with a stake in the matter can sue to enforce the deadline. The agency has settled hundreds of such cases, because, as Jayni Hein, a professor of administrative law at the N.Y.U. Institute for Policy Integrity, told me, "they know they'd likely lose if it went to court." Settlements forced the endlessly deliberated coal-ash rules to be enacted.

In the past few years, conservative critics of regulation have targeted what they call "sue-and-settle." A 2013 Chamber of Commerce report argues that the practice produces "rulemaking in secret" and "private agreements," circumvents Congress, and costs taxpayers dearly in legal fees. That year, at a meeting of ALEC, in Oklahoma City, Pruitt addressed a workshop sponsored by Koch Industries. The subject of his speech, according to an e-mail eventually released by the Oklahoma attorney general's office, was "state primacy in oil and gas regulation and the EPA's sue & settle modus operandi."

In October, Pruitt issued an agency directive ending the practice, saying that past settlements "appeared to be the result of collusion with outside groups." He added, "E.P.A. will not resolve litigation through backroom deals with any type of special-interest group." Given Pruitt's frequent private meetings with industry representatives, this struck many E.P.A. staffers as hypocritical.

Fifty-seven former E.P.A. attorneys wrote a letter of protest, saying that Pruitt had provided "no evidence to substantiate" the claim that ending sue-and-settle would save money. The agency would simply end up in court more, with all the attendant expenses.

Nicole Cantello, an attorney in the E.P.A.'s Chicago office, who spoke to me as a representative of the union, said, "He calls the practice 'collusion'! You can imagine what that means for career E.P.A. lawyers who have a code of ethics. They would view that statement as incredibly insulting."



The one environmental problem that Pruitt has consistently pledged to approach *more* aggressively is "revitalizing contaminated land." The Superfund program is the favorite child—the Ivanka—of the Trump Administration's E.P.A. Pruitt has promised to restore the program to "its rightful place at the center of the agency's mission." In a recent interview with Fox Business, Pruitt couched this shift in moral terms: "The agency the last several years has used regulatory power to weaponize against certain sectors of our economy, as opposed to . . . cleaning up a Superfund site in St. Louis."

Pruitt has complained that cleanups can drag on for years, even decades, and he is right. Superfund has been around since 1980, and though nearly four hundred hazardous-waste sites have been cleaned up, many have languished, and new sites are designated every year. Currently, more than thirteen hundred sites are on the list. In 1995, Congress let lapse the tax on chemical and petroleum companies which funnelled money into Superfund, and now the E.P.A. often must sue companies to pay for the removal of the toxic waste they have left behind. But many sites are "orphaned"—fouled by parties that have long been bankrupt or can't be identified.

The sites can present nightmarish challenges. At the West Lake Landfill complex, in a Missouri suburb of St. Louis, a "smoldering event" has been burning for years under a landfill. The fire is adjacent to another landfill, which contains radioactive waste from the Manhattan Project. Dawn Chapman, a local resident, who co-founded a group called Just Moms to raise awareness of the site, told me, "The smell is unbearable. Some days, parts of the ground collapse and you will see smoke and steam coming out." West Lake has been a Superfund site since 1990, but remediation has been delayed by decades of scientific assessment and internal agency debate.

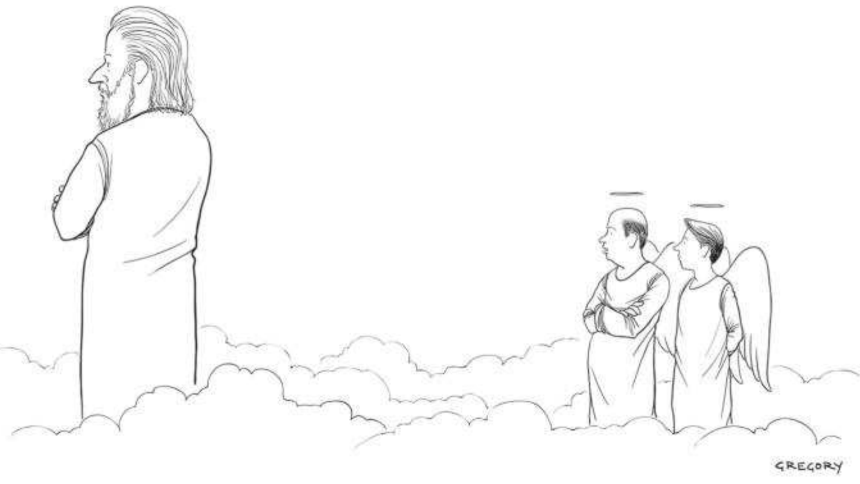
In May, Pruitt created a Superfund task force to promote "expeditious remediation" and the "revitalization of properties across the country." He named Albert (Kell) Kelly, the former chairman of the Oklahoma-based SpiritBank, to head it. In July, the task force issued a report, but did not release minutes or reference materials—the persnickety documentation that usually accompanies government reports. Jeff Ruch, the head of an organization called Public Employees for Environmental Responsibility, made a FOIA request for documentation of the task force's deliberations, and was told that none had been found. "They're asking us to believe the report was an immaculate conception," he said.

The report barely mentions public health, instead stressing the "redevelopment" of sites. Although redevelopment has always been seen as an ancillary benefit of remediating toxic-waste sites, human health and environmental protection were the original priorities. Justin Pidot, a law professor at the University of Denver, who formerly represented the E.P.A. at the Department of Justice, said, "If you put too much emphasis on redevelopment, you risk focussing not on the sites that are the most dangerous but the ones that some developer can use most easily." Pidot noted that the report supported "monitored natural attenuation"—seeing if pollution dissipates on its own—and giving companies "technical impracticability waivers." He said, " 'Impracticability' is a pretty squishy word—it's not 'feasibility.' If a responsible party says, 'Yes, we *could* remove that toxic waste, but it's going to be expensive,' is that 'impracticable'?"

Lee Ann Smith, a community activist who lives near a Superfund site in Asheville, North Carolina, said, "Our concern is some of these companies will get a really good deal on these toxic-waste sites, and, instead of removing the waste, they'll cap it in place with concrete and put a shopping center or a school on it, and you'll still have all those toxins there—and the potential to poison people."

Smith was among a dozen Superfund-site activists who met with Kelly in late January. Pruitt stopped in to reassure everyone that human health, not redevelopment, remained Superfund's top priority. If so, Kelly was an odd choice for the program. He has no background

in environmental science, and his record as a banker is hardly unblemished. In July, the F.D.I.C. fined him a hundred and twenty-five thousand dollars and banned him from banking, citing his "unfitness to serve." (The F.D.I.C. did not detail specific charges.) William Black, a law professor at the University of Kansas whose expertise is banking law, told me that such a ban is unusual. In 2009, SpiritBank received thirty million dollars from the Troubled Asset Relief Program; it has paid back only a fraction of that amount. A loan from SpiritBank allowed Pruitt to buy the RedHawks baseball team. (The E.P.A. declined to make Kelly available for an interview. But Pruitt's chief of staff, Ryan Jackson, provided me with a statement asserting that Kelly never took "any action which threatened the bank.")



"For someone who's supposed to be omniscient, I've noticed he calls all the new guys 'buddy.'"

Pruitt and Kelly have treated the Superfund initiative like an election campaign, shaking hands with local activists and making promises. Some sites have obviously been chosen, in part, to shore up Trump's appeal in red states. Dawn Chapman and her Just Moms co-founder, Karen Nickel, were impressed when Kelly visited Missouri in June and had a forty-five-minute listening session with residents. He gave them his cell-phone number. In February, the E.P.A. announced that the Missouri site would be partly excavated, at a cost to the liable companies of two hundred and thirty-six million dollars. Chapman was grateful to Pruitt, though she realized that other environmentalists might find this baffling. "If your kid was in the middle of the street and a car was barrelling at him, you wouldn't care who jumped out and saved him," she said. "That's where we are at this point. Scott Pruitt was the one to step out, grab the kid, and jump to the other side of the road."

Pruitt has visited East Chicago, Indiana, and also the San Jacinto waste pits, outside Houston—dumping grounds for dioxins and other toxic chemicals. The pits were declared a Superfund site in 2008; in 2011, the E.P.A. put a temporary cap over the waste. But in August the cap leaked during Hurricane Harvey, and the agency soon discovered elevated dioxin levels in an adjacent river. Pruitt visited the site in September and met with Jackie Young, a local environmental activist. Young said of Pruitt, "He had a firm handshake, looked me in the eye, and said he'd have a decision on how they were going to proceed by the time Oklahoma beats Texas in football, which we had a laugh about." Three days before the Sooners-Longhorns game, the E.P.A. came out with an ambitious plan to remove the waste. (The Sooners won.) Young recalls Pruitt saying, "This is something tangible we can do for the American people."

It's important to clean up "tangible" sludge in Texas, Missouri, and elsewhere. But many E.P.A. staffers believe that Pruitt is giving priority to efforts that can be the basis for a before-and-after commercial, while ignoring bigger ecological threats. Unlike a Superfund site, global warming can't be fixed before 2020.

Lois Gibbs is sometimes called the "mother of the Superfund." As a young housewife living in upstate New York, in the seventies, she helped draw attention to a toxic-waste dump in her neighborhood, Love Canal. Gibbs, who founded an organization called the Center for Health, Environment, and Justice, has met with Kelly several times. She was discomfited by the way he and his team were running Superfund "like it's their own small business—not part of an agency with other staffers."

In December, the E.P.A. named twenty-one sites that would get "immediate and intense attention." Gibbs worried that only a few are orphaned sites, which are much harder to clean up. And what about the thirteen hundred or so sites that hadn't grabbed Pruitt's attention? Gibbs urged Kelly to support a Senate bill, introduced by Cory Booker, the New Jersey Democrat, that would restore the industry tax that once amassed money for Superfund. Kelly and Pruitt have not voiced any support for it.

At the same time that Pruitt has been pledging to clean up some Superfund sites, he has been dismantling important Superfund regulations. In December, he announced that he would eliminate a 2016 rule requiring hard-rock-mining operations, such as gold, silver, and lead mines, to provide evidence that they had the financial resources to clean up any toxic messes that they created. The rule came about after environmental groups sued the E.P.A. over "heap-leach" mining, in which cyanide is used to extract gold from open pits. Multiple companies using this method had caused vast contaminations, then declared bankruptcy or sheltered assets. The 1980 Superfund law states that polluters, not taxpayers, must pay for remediation of disaster sites.

In late January, when Lois Gibbs spoke with Pruitt at the meeting with Superfund activists, she asked him what he'd do if money for cleanups ran short. He told her he'd find the funds, but didn't explain how. In an e-mail to me, she recalled, "I asked if he was opposed to the polluter-pays-fees tax, and he said he would never turn down more money—

but didn't come out and say he supported it. Doublespeak."

In February, Pruitt visited a silver-and-gold mine in Nevada, where he discussed the repeal of the financial-assurance law, telling miners that the E.P.A. would no longer be "weaponized" against them. In a statement, he said that the 2016 rule imposed "an undue burden on this important sector of the American economy." After one heap-leach calamity, in which toxic runoff from a gold mine in Colorado trashed the surrounding watershed and farmland, a local resident, Ignacio Rodriguez, told a reporter, "They got the gold and we got the shaft."

Elizabeth Southerland, the former E.P.A. official, said, "Pruitt's repeal of rules, failure to enforce rules, and weakening of rules will result in him creating many *new* Superfund sites."

In Ann Arbor, Michigan, there is an E.P.A. lab stocked with new-model cars and trucks. Since 1971, scientists at the lab have been testing new vehicles to insure that updated emissions standards are achievable, and that manufacturers are meeting them. They put the vehicles on big metal rolls—treadmills for cars—and assess their engines and their fuel emissions. The lab has developed tests that simulate myriad driving conditions, from open highway to teeth-clenching city traffic. In one testing area, employees can raise the temperature to ninety-five degrees Fahrenheit and crank up the car's A.C., or lower the temperature to twenty degrees, simulating a frosty morning in New Hampshire.

John German, an engineer who has worked for Chrysler and Toyota as well as at the E.P.A. lab, and who is now a senior fellow at a nonprofit called the International Council on Clean Transportation, told me, "The E.P.A. lab really is the gold standard internationally." In recent years, lab engineers helped prove that Volkswagen had rigged some of its diesel cars so that emissions controls kicked in only under laboratory conditions, and were emitting as much as forty times more nitrogen oxide in real-world driving. In 2017, the company was ordered to pay $2.8 billion in criminal fines.

In the early seventies, the E.P.A., operating under the Clean Air Act, began requiring car manufacturers to sharply reduce emissions. Some regulations were designed to be "technology forcing": high-efficiency vehicles did not yet exist, but regulators expected the auto industry to get creative under pressure. Technology forcing was controversial, but it worked. Car manufacturers developed the catalytic converter (to transform harmful hydrocarbons and nitrogen oxides into water and carbon dioxide) and electronic fuel injection (to improve fuel efficiency and produce cleaner exhaust).

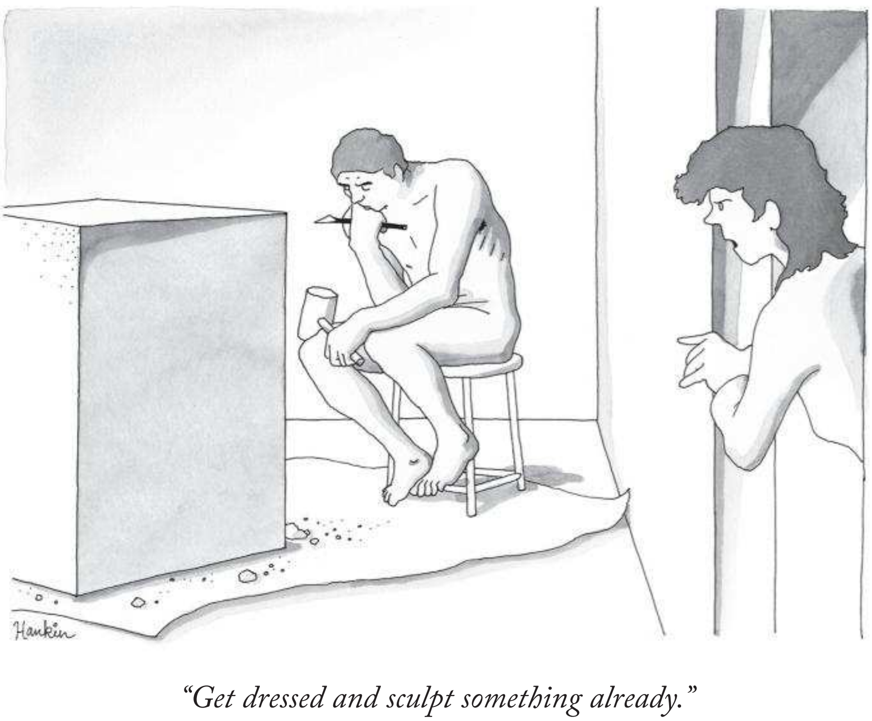
There were other benefits down the line. Catalytic converters hastened the removal of lead from gasoline, because lead made the converters malfunction. Fuel injection, which relied on electronic sensors, expedited the computerization of cars, which made them cleaner and more efficient. Joseph Somers, a retired engineer who worked at the Ann Arbor lab for four decades, told me that, because of these innovations, "about five hundred current-model-year vehicles emit what a single 1970 model did."

In 1974, a top Chrysler engineer warned a Senate committee that new emissions standards would essentially "outlaw" station wagons and large sedans. But the car companies adapted, and were happy when their large sedans got better as well as cleaner. "Things that were controversial, once they worked, were widely accepted," Somers said.

The auto industry came to rely on E.P.A. protocols. The lab, which designed its own technologies and components to help reduce emissions, now holds sixty patents. Gay MacGregor, until recently a senior policy adviser at the lab, said, "Because the regs are based on data and research, and the people in the industry are also engineers and scientists, you can come to an agreement on data a lot of the time."

John German told me that the E.P.A. devised a way to make cost assessments that were more accurate and transparent. The lab began consulting with specialists who can "take a car apart, right down to the screws," and tabulate the exact price of making a particular change. Now, German said, "it's hard for the manufacturers to argue about the costs."

The lab also assesses the effects of multiple innovations. German said, "If you take a single technology and a single vehicle, it's pretty easy to figure out what the efficiency is, but what if you combine technologies? This one gets you three per cent, this one five. If you put 'em together, do you get eight, or are there overlaps in benefits, so you only get six?" At a rally outside the lab in May, Margo Oge, who headed the E.P.A.'s office of transportation and air quality from 1994 to 2012, said that the



"Get dressed and sculpt something already."

facility "has done more to reduce emissions and air pollution than any other" lab in the country.

In the Trump Administration's original budget blueprint, over-all E.P.A. funding was to be cut by thirty-one per cent. The budget of the division that houses the Ann Arbor lab was to be reduced from a hundred and eight million dollars to seventy-six million.

In July, the House Appropriations Committee settled on a much smaller over-all cut for the agency—6.5 per cent. But, according to an analysis by the Environmental Protection Network, a group of E.P.A. alumni who monitor changes under Pruitt, the agency's budget, adjusted for inflation, was already lower than it had been since 1986, so even the House proposal represents an alarming reduction. Last May, Representative Debbie Dingell, a Michigan Democrat, said of the lab, "This is a national treasure, and we will not let them destroy it." Gay MacGregor retired so that she could organize a group to defend it. She felt that, even if funding were restored, the lab's work on reducing greenhouse-gas emissions remained vulnerable under Pruitt's leadership.

MacGregor's fear was soon realized. In August, Pruitt announced that the E.P.A. would be "reopening" the question of whether the latest clean-car standards—which mandate that auto manufacturers achieve an average fuel efficiency of 54.5 miles per gallon by 2025—are feasible. Those standards, established under the Obama Administration, were aimed at cutting greenhouse-gas emissions and reducing oil dependence. The rule required the agency to conduct a midterm evaluation of how things were going; it did so in 2016, and determined that the standards remained within reach.

That November, Gina McCarthy, the E.P.A. administrator at the time, opened up a monthlong public comment period for the midterm evaluation. When Pruitt took over, multiple automobile trade associations complained that the comment period had been rushed, and that the requirements were onerous. Pruitt announced a "robust review of emissions standards."

McCarthy told me she remained confident that there was "literally nothing hasty" about the process. Indeed, the latest research had suggested that meeting the target would be cheaper than the E.P.A. had predicted. The agency's goals did not even require the development of electric cars. In the meantime, the U.K. and France had announced that no diesel or gasoline vehicles would be sold there by 2040, India had promised to go electric by 2030, and China had created stringent new goals for the production of electric and hybrid vehicles. McCarthy said it was "heartbreaking" to watch Pruitt "undo so much" when "climate change is so clearly happening."



One crisp evening in October, I went to a meeting of about a dozen current and former lab employees that Gay MacGregor was hosting at her Ann Arbor apartment. Everybody sat in a circle in her living room, drinking beers. People who still worked at the lab asked not to be named. In the past, they said, it had been easy to bring reporters to the lab. But it was difficult under Pruitt. (My request to visit the lab was declined.)

It was an odd evening, with these earnest government engineers and economists gathered in a kind of samizdat bunker. Most had known each other for years. Somebody mentioned the bushy sideburns they'd had when they joined the lab, in the seventies. Another person brought up the engineer Joseph Somers's photographic memory.

"He remembers my first car," one guy said.

"That brown Vega!" Somers said.

"See? *I* didn't even remember that."

Soon, though, the tone grew serious. Jim McCargar had come to the E.P.A. in 1983, and during his years at the agency he turned to climate science. As an undergrad at Harvard, McCargar had started out majoring in physics and astronomy, but while hitchhiking across the country one summer he'd got caught up in the environmental movement and switched to biology. Now, he said, a lot of young scientists coming out of school wanted to work on climate change. If the E.P.A. lost its edge in climate science, the young talent would go elsewhere. (The French President, Emmanuel Macron, recently awarded thirteen research grants to U.S.-based climate scientists, and invited them to relocate to France.) "I have a leaden feeling in my soul about what's happening," McCargar said. "We put a huge amount of work into analyzing this and creating these regulations."

Thousands and thousands of pages, somebody interjected. Ten years. Millions of dollars.

"And now we get this President in there who's saying, 'We're just going to look at it all *again*.' What for?"

Jane Armstrong, who had been the lab's director of compliance, working closely with auto manufacturers, said, "The best and the brightest come here. If you dumb down the agency, how do you keep recruiting the best?"

She and a few others remembered weathering the two years, during the Reagan Administration, when the agency was run by Anne Gorsuch, a conservative state legislator from Colorado (and the mother of the Supreme Court Justice Neil Gorsuch). Those years were the only precedent to Pruitt's tenure. Gorsuch had cut enforcement, accommodated polluters, and antagonized career staff. She resigned after being held in contempt of Congress, for refusing to comply with a corruption investigation targeting a Superfund administrator.

William Ruckelshaus, whom Reagan had brought back to the agency after Gorsuch's departure, restored morale. He established transparency in decision-making, and he conveyed respect for career employees. In a speech, he declared, "There is no finer group of public servants in this country." The E.P.A.'s mission, he said, was "transcendent."

Somers said, "I've had about twelve people call me asking what was it like then—what should they do? My advice is 'Stay, if you can.'"

One of the engineers said that it might take a while to "rebuild capacity" after Pruitt. But it would be done. The public, he reminded everyone, "is expecting us to protect the planet." He said, "Pruitt is a temporary interloper. *We* are the real agency." ♦

LETTER FROM ST. THOMAS

The Edge of Identity

Hannah Upp goes missing for weeks at a time, losing her sense of self. Can she still be found?

BY RACHEL AVIV

Hannah Upp had been missing for nearly two weeks when she was seen at the Apple Store in midtown Manhattan. Her friends, most of them her former classmates from Bryn Mawr, had posted a thousand flyers about her disappearance on signposts and at subway stations and bus stops. It was September, 2008, and Hannah, a middle-school teacher at Thurgood Marshall Academy, a public school in Harlem, hadn't shown up for the first day of school. Her roommate had found her wallet, passport, MetroCard, and cell phone in her purse, on the floor of her bedroom. The *News* reported, "Teacher, 23, Disappears Into Thin Air."

A detective asked Hannah's mother, Barbara Bellus, to come to the Thirtieth Precinct, in Harlem, to view the Apple Store surveillance footage. Barbara watched a woman wearing a sports bra and running shorts, her brown hair pulled into a high ponytail, ascend the staircase in the store. A man stopped her and asked if she was the missing teacher in the news. Barbara said, "I could see her blow off what he was saying, and I knew instantly it was her—it was all her. She has this characteristic gesture. It's, like, 'Oh, no, no, don't you worry. You know me, I'm fine.'" Another camera had captured Hannah using one of the store's laptops to log in to her Gmail account. She looked at the screen for a second before walking away.

The sighting was celebrated by Hannah's friends, many of whom were camping out at her apartment. They made maps of the city's parks, splitting them into quadrants, and sent groups to look in the woods and on running paths and under benches.

According to the Myers-Briggs personality test, which Hannah often referenced, she was an E.N.F.P.: Extraverted Intuitive Feeling Perceiving, a personality type that describes exuberant idealists looking for deeper meaning and connection. Five of her friends used the same phrase when describing her: "She lights up the room." A friend told the *News* reporter, "Everyone you talk to is going to say she is their closest friend. She has no barriers. She was raised to trust and care for everyone, and she did."

Two days after Hannah was seen at the Apple Store, she was spotted at a Starbucks in SoHo. By the time the police arrived, she had walked out the back door. The police recorded sightings of her at five New York Sports Clubs, all of them near midtown, where the detective on the case presumed she had gone to shower. In an article about her disappearance, the *Times* wrote, "It was as if the city had simply opened wide and swallowed her whole."

On September 16th, the twentieth day she'd been missing, the captain of a Staten Island ferry saw a woman's body bobbing in the water near Robbins Reef, a rocky outcropping with a lighthouse south of the Statue of Liberty. Two deckhands steered a rescue boat toward the body, which was floating face down. "I honestly thought she was dead," one of the men said. A deckhand lifted her ankles, and the other picked up her shoulders. She took a gasp of air and began crying.

The woman was taken to Richmond University Medical Center, on Staten Island. For three weeks, her own biography had been inaccessible to her, but when the medical staff asked her questions she was suddenly able to tell them that her name was Hannah and to give them her mother's phone number. Barbara arrived within an hour. (Hannah's father was living in India, where he taught at a seminary; her brother, a Navy officer, was stationed in Japan.) Barbara said that Hannah looked "both sunburned and pale, like she'd been pulled behind a boat for three weeks." The first thing she said was "Why am I wet?"

She was treated for hypothermia, dehydration, and a severe sunburn on the left side of her body, and her condition rapidly improved. Four friends came to the hospital that afternoon. Manuel Ramirez, her roommate, said, "She saw me and smiled and said something like 'I hope they release me soon, because I have to set up my classroom.' She clearly didn't get that three weeks had passed."

Later that day, the police interviewed Hannah privately. Barbara stood outside the room. "I could hear her trying to respond to their questions—she was really working at it, trying to give them what they wanted—but she didn't have any explanation." Her last memory was of taking a run in Riverside Park, near her apartment, the day that she went missing.

Barbara, a United Methodist pastor, slept in a chair beside Hannah's hospital bed. In the middle of the night, Hannah jolted awake. "I was at a lighthouse," she said, then immediately fell asleep again. In the morning, when Barbara asked about the lighthouse, Hannah said that she had no memory of it.

Hannah was transferred to a psychiatric unit run by Columbia University Medical Center. She underwent a series of brain-imaging tests, but the doctors couldn't find any neurological condition that would cause her to forget her identity. They concluded that the episode was psychological in nature. As soon as she was lifted from the river, she remembered all the details of her life prior to her disappearance.

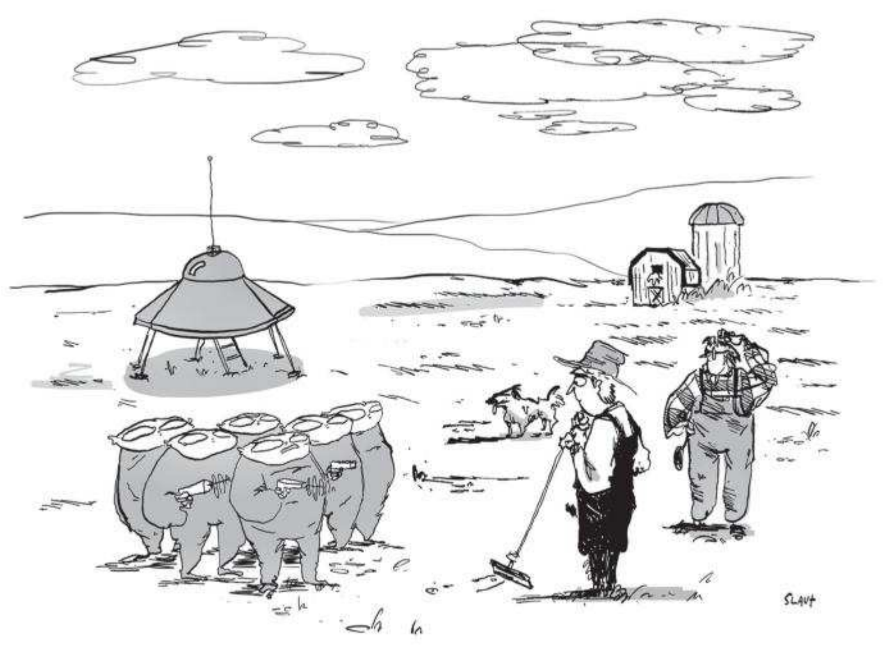
She was given a diagnosis of dissociative fugue, a rare condition in which people lose access to their autobiographical memory and personal identity, occasionally adopting a new one, and may abruptly embark on a long journey. The state is typically triggered by trauma—often sexual or physical abuse, a combat experience, or exposure to a natural



PHOTOGRAPH: JOHN J. MEYER/COURTESY BARBARA BELLUS (WOMAN)

"Hannah gives so much to other people that at a certain point there is literally nothing left," a friend said.

ILLUSTRATION BY CRISTIANA COUCEIRO



"Take us to your most influential power couple."

disaster—or by an unbearable internal conflict. Philippe Tissié, one of the first psychiatrists to study fugue, characterized it as a kind of self-exile. In 1901, he wrote, "The legend of the Wandering Jew has become a reality, proved by numerous observations of patients or unbalanced persons who suffer from an imperious need to walk, on and on."

Hannah was hypnotized, to see if she could recall a traumatic event that triggered her fugue, but she couldn't remember anything unusual. Hannah and her mother, father, and brother said that as a young child she hadn't endured anything that they considered trauma. Hannah's roommate, Ramirez, said that, when he visited her on the psychiatric unit, "she was her normal, upbeat, funny self. I remember her rattling off all these possibilities: 'Was I in a hit-and-run? Was I mugged? Was I assaulted?'" The beginning of the school year was always stressful—her students struggled with problems, such as hunger and unstable housing, that she couldn't address within the confines of her classroom—but her colleagues had the same dilemmas.

In the hospital, Hannah read the news articles about her disappearance and the comments from readers, some of whom accused her of staging it. She was so embarrassed that she contemplated changing her name. But, her friend Piyali Bhattacharya said, "she ultimately decided—and she was very clear on this—that she did not want to run away from who Hannah Upp was."

One of the psychiatrists on Columbia's psychiatric unit, Aaron Krasner, now a professor of clinical psychiatry at Yale, described the comments in the news as "very condemning and discrediting. I think this speaks to the rage that dissociative conditions incur in certain people. There is an ineffable quality to dissociative cases. They challenge a conventional understanding of reality." He told me that he was troubled by the narrowness of medical literature on these states; there are no medications that specifically target the problem. "Dissociative fugue is the rare bird of dissociation, but dissociation as a phenomenon is very common," he said. "I think as a field we have not done our due diligence, in part because the phenomenon is so frightening. It's terrifying to think that we are all vulnerable to a lapse in selfhood."

Freud explored dissociative states in his early writings, but the phenomenon did not fit easily into his sweeping theory of human behavior. Most of the dissociative patients he saw said that they had been sexually abused as children, but he ultimately concluded that their memories were fantasies. He proposed that unacceptable wishes were repressed into the unconscious, and that traces of them resurfaced in people's fantasy lives. Theorists of dissociation disagreed, arguing that some events were so traumatic that, afterward, the mind was unable to develop as an integrated whole. The French philosopher and psychologist Pierre Janet, who developed the first formal theory of dissociation, in 1889, wrote, "Personal unity, identity, and initiative are not primitive characteristics of psychological life. They are incomplete results acquired with difficulty after long work, and they remain very fragile." After Freud's success, Janet's work fell into obscurity.

Cases of dissociation had a whiff of the mystical, and doctors tended to stay away from them. Dozens of articles from the turn of the twentieth century, published in the *Times*, recount miraculous, inexplicable transformations: a Minnesota reverend, missing for a month, realized that he had travelled across the county and enlisted in the Navy, "though never before in his life had he even gazed on the ocean"; a professor thought to have drowned was discovered, three years later, using a new name and working as a dishwasher; a deacon in New Jersey woke up and "realized the room he has occupied for more than a year was strange to him" and his Bible was marked with someone else's name. He had been missing for four years.

The most famous American fugue patient was Ansel Bourne, a preacher who, in 1887, left his home in Rhode Island with a vague sense that he had fallen from "the path of duty." He travelled to Norristown, Pennsylvania, two hundred and forty miles away, and opened a shop selling stationery and candy. He went by the name Albert Brown. His neighbors found his behavior perfectly normal. Two months after leaving home, he knocked on his landlord's door and asked, "Where am I?"

The philosopher and psychologist William James offered to treat him by using hypnosis to "run the two personalities into one, and make the memories continuous." But the two identities could not be merged. Bourne returned

to his wife in Rhode Island with almost no memories of his life as Albert. In an essay that James wrote shortly before treating Bourne, he argued that science would advance more rapidly if more attention were devoted to unclassifiable cases—"wild facts" that threaten a "closed and completed system of truth." Understanding splits in consciousness, he wrote, is "of the most urgent importance for the comprehension of our nature."

But, in the decades after Bourne's disappearance, the study of dissociation largely vanished. The prevailing schools in psychology and psychiatry—behaviorism and psychoanalysis—adopted models of the mind that were incompatible with the concept. Then, in the nineteen-eighties, several thousand people claimed that, having been abused as children, they had developed multiple selves. The public responded to these stories much as it had to the surge of dissociative cases at the turn of the century: this sort of mental experience was considered too eerie and counterintuitive to believe. Whatever truth there was to the condition was lost as hyperbolic stories circulated in the media: tales of feuding selves and elaborate acts of sexual abuse, such as torture by satanic cults. The legacy of that time is that people with similarly radical alterations of self are viewed with distrust.

Richard Loewenstein, the medical director of the Trauma Disorders Program at Sheppard Pratt, in Towson, Maryland, may have worked with more fugue patients than any other psychiatrist in the country. He said that modern psychiatry and psychology still fail to "pay much attention to the self or to the complexities of subjectivity." When he encounters people in fugues, often in emergency rooms, he finds it nearly impossible to treat them in that state. He said that, in conversation, "there's a quality of them running away from whatever you are trying to ask them. If you begin to hold on to them and try to get them to stay in one place, they go—they're gone."

The first time I spoke with Hannah's mother, early this year, she told me it was important that an article about her daughter's experience "let it stay a mystery." She felt that Hannah's condition lay at the "edges of knowledge," and she didn't want to impose false connections. The more she read about fugue, the less she felt she understood it. Hannah's father, David Upp, wrote in an e-mail, "I suspect they will need a new paradigm, before Fugues can fit ANY theories." He suggested that "magical realism comes closer" than any current psychological theory, and said that one of Hannah's favorite authors is Isabel Allende. "Perhaps a book like 'El Plan Infinito'?" he wrote. The book's hero spends decades wrestling with the teachings of his father, who, like Upp, became an itinerant preacher.

As a child, Hannah was "the princess of her church," as a friend described her. She grew up in Japanese-American churches in Oregon, where her parents served as pastors. (Both of her parents are American, but Barbara taught in Japan and is fluent in Japanese.) When she was young, her parents' perspectives on theology sharply diverged. Upp characterized himself with the phrase *homo unius libri*, "man of the one book." In monthly newsletters sent to colleagues, congregants, and friends, he argued that "there is no such human as a natural homosexual." He urged his readers to "fully support Biblical Morality and to oppose any compromise with sexual deviance/perversion."

Barbara filed for divorce when Hannah was fifteen. Upp moved abroad and taught the Gospel, often to indigenous tribes, in Fiji, Palau, Guam, Malta, India, Zimbabwe, Guyana, and the Philippines, where he now lives in a one-room house in a remote village. In 2007, Barbara took a leave from her position as a pastor and moved to Pendle Hill, a Quaker retreat outside Philadelphia. She and Upp stopped speaking to each other.

Hannah was a creationist when she arrived at Bryn Mawr, and she joined the InterVarsity Christian Fellowship, an evangelical campus ministry. Her friend Piyali Bhattacharya, who was raised Hindu, once asked Hannah, "Do you think I'm going to Hell?" She said that Hannah began crying. "Hannah lost it. She couldn't answer the question. Whereas another person might try to defend her beliefs, Hannah is the kind of person who would take a question like that and turn it in on herself and think about it and come out the other end being a different person." Bhattacharya went on, "She knew she was loving and openhearted, but beyond that I think she had zero idea of who she actually was. She wanted to give herself over to someone or some idea."

In the spring of her sophomore year, Barbara said, Hannah called her, crying, after going to a talk by Beth Stroud, a United Methodist minister who was defrocked after telling her congregation that she was in a relationship with a woman. "Hannah was troubled that something that she'd thought was part of her faith was cruel," Barbara said. By her junior year, Hannah was dating a woman.

Although she found herself drawn to Quakerism, she still travelled with her father at least once a year in whatever part of the world he was teaching. Her friend Hannah Wood wondered what it meant for Hannah to "swallow a part of herself down while she was travelling," but Hannah always spoke fondly of her father. Her friends liked to joke that she resided in "Hannah Land." Her friend Amy Scott said, "She lives in this separate place where there are butterflies and birds, and they follow her around. Everything is good and everyone is happy, and there's no conflict, ever."

Hannah thought that her fugue may have begun with a liminal phase: there were two days when she slept in her apartment but communicated with no one. Her bank records showed that she had gone to a movie in Times Square which she had no memory of seeing.

During the weeks that Hannah spent wandering, her family believes that she understood on some level that people were searching for her. "She characterized her recollections of that time as just being continually roaming," her brother Dan said. "We think that maybe she had this sense that she was being hunted and didn't know why."

A few months before her disappearance, Hannah and a friend had gone to a meeting for "freegans," a group that tries to minimize its consumption of resources, and they'd visited grocery

stores on the Upper East Side, collecting discarded food. Dan said that the family believed Hannah "remembered what she'd learned on the tour and was eating perfectly good food that the stores were not able to legally sell the next day. She seemed to have access to those memories. Even if she didn't understand why at that time, she gravitated to places that were familiar."

Dan met with the captain of the Staten Island ferry and analyzed the currents in the Hudson River. They surmised that Hannah must have entered the river in lower Manhattan before the tide took her south. Hannah and Dan walked along the piers downtown, and when they got to Pier 40, a former marine terminal on the west end of Houston Street, Hannah told him that the place felt familiar. She remembered lights floating on the water.

Dan learned that there had been a Japanese floating-lantern ceremony on the pier on September 11th, to honor the victims of the World Trade Center attacks. As a child, Hannah had danced in an annual Obon festival, which has a floating-lantern ceremony, the lights representing the souls of the departed. Barbara said, "Something about that powerful ritual registered."

Based on the condition of her body the day she was found, she and her family concluded that she had been at the floating-lantern ceremony and, three days later, had returned to the pier and entered the water. Barbara said, "Maybe when Hannah was getting alarmed or upset because people kept saying her name, it felt more comfortable to go back to that place."

It is likely that Hannah spent the night in the river. She later checked the lunar calendar and was able to confirm her memory that there had been a full moon that night. Her skin showed signs of prolonged immersion. Barbara said that Hannah vaguely remembered "holding on to the hull of a barge—she may have wanted some rest—and then she realized that she was being sucked toward the propeller, which is a very dangerous thing, so she swam away." It was as if her body, undirected by what we typically conceive of as consciousness, were still intent on survival.

Hannah and her family concluded that she either swam to or was washed up onto Robbins Reef. She scraped her knees on its rocks. She slept there the following day, long enough to get a sunburn. Then she returned to the water.



"Yes, the Uncatchable Cat Burglar is a great nickname—but can I suggest you combine it with running away?"

Bhattacharya said that when she and Hannah spoke about the experience they often lapsed into silence. "It felt like the words we have in the English language were not sufficient to describe this," Bhattacharya said. Hannah saw a few therapists, but found conversations with her friends more helpful. She described the mental-health system as dogmatic and overly attached to its diagnostic models. She felt as if her experiences had to be reshaped to fit within the diagnoses. Barbara said that Hannah told her, "If people want to spend a lot more time figuring out what set this off, they can, but I'm not going to spend the rest of my life focussing on it." Barbara found the same tendencies within psychiatry as she had in the church: an emphasis on what she described as "the letter of the law, rather than the spirit of it." She didn't think it "left room for the reality of individual unique experience."

Hannah's fugue seemed to fit what Etzel Cardeña, a professor of psychology at Lund University, in Sweden, describes as "anomalous psychological experience." Cardeña has published a textbook on phenomena that "fall between the cracks of the house built by contemporary mainstream psychology." He told me, "In our culture, we have a nice narrative that personality is stable. That is a fiction. When a person enters a fugue and becomes someone else—or isn't there—it's an exaggerated version of the way we all are."

Cardeña has done research on altered states of consciousness in religious practice, and he found that some people who would otherwise be given a diagnosis of dissociative disorder have been able to channel their tendencies into rituals of spirit possession, trance, speaking in tongues, or intimate experiences of God. He said, "There is a cultural context for surrendering themselves. It's not about getting rid of the dissociative state so much as giving it a syntax, a coherence, a social function." In an article in the journal *Spiritus*, T. M. Luhrmann, a Stanford anthropologist who studies religion and psychiatry, suggests that there is a

“shared psychological mechanism” in dissociation and evangelical worship: the capacity to withdraw from the everyday and become entirely absorbed by interior experience. “Trance-like responses to great distress have occurred throughout history and across culture,” she writes.

Nearly all the medical literature suggests that people in fugue states adopt new identities, but Barbara said that, for Hannah, “it was more like the complete absence of identity,” a kind of “dangerous nothingness.” None of Hannah’s friends or family had ever seen her in a fugue state, beyond the surveillance footage from the Apple Store. Barbara said, “Nothing we know indicates that she built a new identity—unless she did and it was lost when she came back.”

David Spiegel, a professor of psychiatry at Stanford who has spent his career studying dissociation, told me that he’d never heard of someone navigating the world without something that resembles an identity. “It may be sparse, with far less structure or detail to it, but I don’t know if you can be a functioning human without something that passes for a self,” he said. “You need some kind of orientation for understanding who you are and what you are doing here.”



“Now that you’ve met all the people who could easily replace you, I’d like you to meet the person who is actually going to replace you.”

A little more than a year after her disappearance, Hannah left New York, joining Barbara at Pendle Hill. Sometimes called Mecca for Quakers, the institution was founded in 1930 as a retreat for people of all religions. Hannah worked in the kitchen and attended daily meetings for worship, a half hour of silence.

Quaker practice operates according to the premise that a single person cannot see the entire truth, and the people at Pendle Hill never asked Hannah for answers about her disappearance. Patrick Roesle, an intern at Pendle Hill whom Hannah dated there, said that he viewed the episode as a “freak accident.” He believed that “Hannah gives so much to other people that at a certain point there is literally nothing left, and she departs from herself.” When friends had celebratory occasions or setbacks, however minor, she would write them cards by hand. To a friend at Pendle Hill who broke an arm, she wrote, “It’s an honor to fold your laundry or crawl under your bed, for, you see, that’s what community is all about!” Her friend Hannah Herklotz said that Hannah was so attentive to other people’s needs that it sometimes felt impossible to reciprocate. “You’d come out of a two-hour conversation that you’d feel was incredibly deep, and you’d feel heard and known and seen, and then you’d realize later: she didn’t tell me a thing about herself.”

After working at Pendle Hill for three years, Hannah was hired as a teaching assistant at a Montessori school for underserved children in Kensington, Maryland. She was drawn to Maria Montessori’s notion of an “education capable of saving humanity”: by protecting the autonomy of children, society would become more loving, peaceful, and unified. Roesle said, “She flung herself—all of her weight—into learning Montessori, internalizing Montessori, loving Montessori.”

On the morning of Hannah’s first day of class, Barbara got a phone call from the police. They told her that Hannah’s purse, wallet, and cell phone had been found on a wooded footpath in Kensington. A colleague reported that as she was driving to school she had seen Hannah walking quickly in the wrong direction. Hannah’s mother and friends from Pendle Hill drove to Maryland and looked for her in the woods and put up flyers around town. They discovered that she hadn’t slept at her apartment the night before. In the previous twenty-four hours, no one had talked to her.

The next day, at 10:30 P.M., Barbara received a call from an unknown number. “All she said was ‘Mom?’ ” Barbara said. Hannah had found herself in a dirty creek in a residential area in Wheaton, Maryland, a mile and a half from her school. There was a shopping cart beside her. Barbara’s housemate at the time, Jennifer Beer, recalled that Hannah “regathered herself instantly—it was sort of like her soul getting sucked back in.” Hannah walked to the closest commercial area and borrowed a stranger’s phone. She realized that she had been walking for more than two days.

Later, Hannah reviewed the text messages she’d sent the day that she disappeared. “We could see in the texts where she had made that transition,” Barbara said. “She could remember sending some of the texts, but then there came a point where she said, ‘I

don't remember writing any of this.'"

Barbara said that after each fugue she felt a kind of "awe at where Hannah had been." The ancient Greeks had two words for time: *kronos*, chronological time, and *kairos*, which is often translated as "the right time" and cannot be measured. Barbara said, "I imagined her as having entered more fully into *kairos*—the appointed time, the fullness of time. There's a suspension of certainty."

Hannah's friends were struck by the similarities between her two disappearances. In both instances, she had disappeared at the beginning of the school year, after travelling with her father. David Upp had pondered whether the vacations had been a trigger for her, but he wasn't satisfied with that explanation. "Travel? That's just 'what we do,'" he wrote me. "Hannah and I have been to twenty-five nations together, so it is 'normal' not disruptive." In an article for *Bryn Mawr Now*, a campus newsletter, Hannah had once described the "violent surprise" and loneliness of returning home from a trip to Ghana. "I thought I was coming 'home,' but was surprised at the longing for a new place that had grown so comfortable," she wrote.

In both fugues, she had been drawn to water. Her friend Amy Scott said, "The way she describes it is she finds herself in a body of water and realizes who she is."

Hannah returned to her job within a few days. The following year, she was hired as a teaching assistant for preschoolers at a Montessori school in St. Thomas, in the U.S. Virgin Islands. When she disclosed her condition, the administrators at the school were warm and accepting. She joked with friends that she was moving to paradise.

After the Maryland disappearance, Barbara said that friends asked her, "Couldn't you put a chip in her, like you would in a schnauzer?" The police in Maryland had proposed using the type of ankle bracelet designed for people who are under house arrest. "She didn't want to pursue it—she refused to be defined by this—and I chose to honor her decision," Barbara said. "I had to be clear that I'm not living my daughter's life—she's living it, and she needed to have the freedom to make choices."

Hannah moved to the east end of St. Thomas, away from the docks for cruise ships, which bring tens of thousands of tourists to the island every week. She could see the British Virgin Islands from the balcony of her apartment, which she called her "island palace." A parent of one of her students described her as a "modern-day Mary Poppins." The head of the school, Michael Bornn, said, "Whenever a parent showed up for a tour, we took them to Hannah's classroom."

After a year of teaching, the school paid for her to take summer classes at a Montessori training center in Portland, Oregon, so that she could eventually become certified and lead her own class. One of the school's directors, Norma Bolinger, said, "She totally absorbed the Montessori theory, to the point where I could see her becoming a mover and shaker in politics and trying to get Montessori into all schools globally." Hannah made a pilgrimage to Maria Montessori's grave, on the Dutch coast. Bhattacharya said, "It was Hannah's new church. There's a book; there are rules. If you follow the rules, good things happen to good people. Her desire to worship never left her."

In St. Thomas, she attended a few meetings devoted to the Bahá'í faith, a Persian religion that teaches the unity and equality of all people, but she was put off by what she saw as the community's negative judgment of nontraditional families. She saw a therapist on the island, but she put more stock in tending to her physical health. She swam in the ocean nearly every day, becoming so strong that she could reach cays more than two miles away. "She found the world underwater just so peaceful and so magical," Scott said. "Her solace was always the majesty of the island."

Hurricane Irma hit St. Thomas on September 6, 2017, a week after Hannah began her fourth year of teaching. That summer, she had completed her Montessori degree. She and her roommates huddled in the laundry room of their apartment. The wind reached a hundred and eighty-five miles an hour, shattering one of their windows. With each new gust, a power line, dislodged by the storm, smacked the roof.

The next morning, the island had turned brown, the trees stripped of their leaves. Suzanne Carlson, a reporter at the Virgin Islands *Daily News*, told me, "I heard a lot of people say, 'This is it—St. Thomas is over.'" Hannah texted friends that she was safe but the island was devastated. "I don't recognize anything," she wrote.

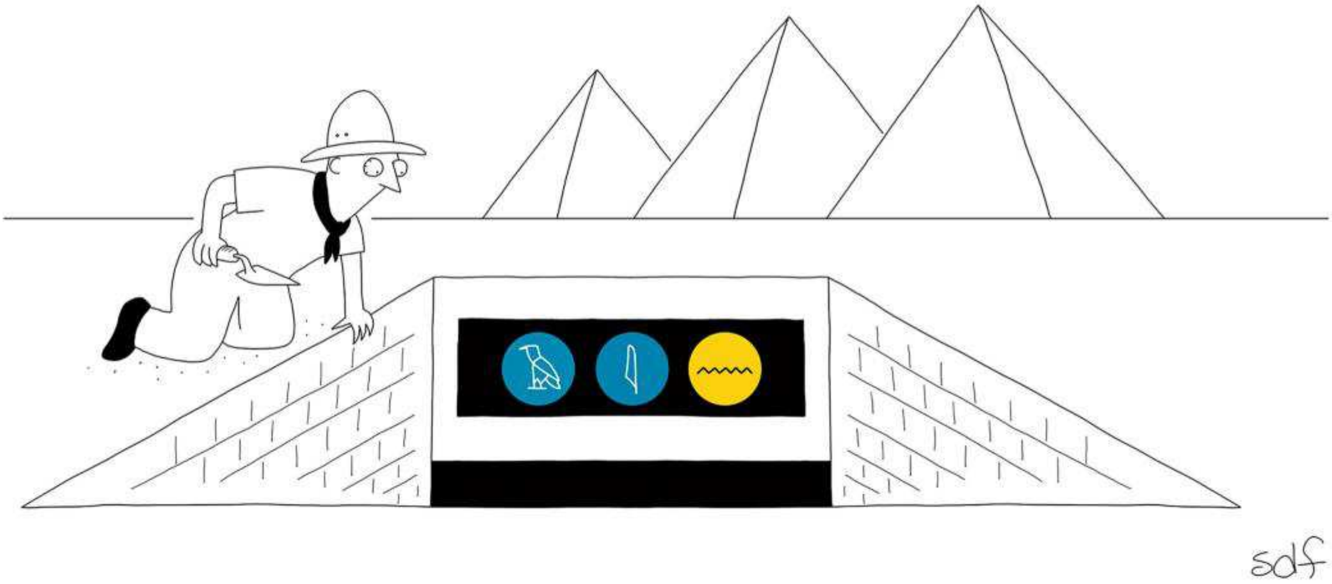
Since her 2008 fugue, Hannah's roommate from New York, Manuel Ramirez, had used a code phrase to check up on her. After her first disappearance, they had made fun of an ABC News story that characterized her as a "friendly vegetarian who constantly experimented with new dishes." After the storm, Ramirez texted her "friendly vegetarian." Hannah wrote back, "I like to try new dishes."

Six days after the storm, Hannah drove to the house of an ex-boyfriend, Joe Spallino, a scuba instructor, and saw that his belongings were gone. Hannah learned from his landlord that he had rushed to the marina to get on one of the "mercy ships" giving people free rides off the island. Hurricane Maria, another Category 5 storm, was forecast to hit the island the following week.

Hannah drove to the marina to say goodbye. Spallino was waiting to board a cruise ship to Puerto Rico, and they talked for several hours. Spallino said, "I kind of jokingly asked, 'What if you come along?' She thought about it and said that, in reality, she wouldn't want to."

After Hannah left the marina, she never used her phone again. The next day, she helped Norma Bolinger prepare the school for Hurricane Maria by taking pictures off the walls. Bolinger said, "She responded to everything I asked with 'Yes, Norma.' 'Yes, Norma.' 'Yes, Norma.' Which normally wasn't her tone of voice to me. Hannah was not a 'yes' sort of person. If you asked her to do something, she would want to know why."

That night, Hannah's three roommates told her that they were all trying to leave the island. One of them, Leslie Bunnell, said that Hannah told her, "I'm staying—that's where my heart is. School is going to be the first



step toward normality for these kids." The next morning, Hannah said that she was heading to school, and a roommate watched her get in her car. She never showed up at the school. The following day, there was a faculty meeting, and she wasn't there. Her friend Maggie Guzman called Hannah's closest friends, on the island and in the States, but no one had spoken to her for three days. It was the same time of year as her previous two fugues, and they told Guzman to search near the water.

Guzman and other friends started with Hannah's favorite beach, Sapphire, where she often snorkeled. Near the water, there was a small bar that served hamburgers and mimosas. On a stool, they found Hannah's sundress, her sandals, and her car keys. Workers said that they had discovered the belongings in the sand when they were clearing debris from the storm. Hannah's car was in the parking lot. Inside were her purse, wallet, passport, and cell phone.

Given Hannah's strength as a swimmer, her friends assumed that she could survive for several days in the water. By boat, they searched the shoreline and a small island nearby, where the current might have taken her. The Coast Guard sent three helicopters. Her friends also checked the manifests of people evacuated on mercy ships, but her name wasn't listed. The storm had exacerbated deep divisions on the island—some people could leave, while others had no means to travel and nowhere to go—and Hannah's family and friends felt self-conscious about the fact that they were searching "for one white gal in a sea of troubles and suffering," as one put it.

After three days, they had to call off the search to prepare for Hurricane Maria, which brought heavy rain to the island. When the storm subsided, an E.M.T. named Jacob Bradley, who had set up a makeshift emergency-medical-services station on the island, organized another search. If Hannah had drowned, her body would likely float to the surface within a few days. Bradley circled the island and all its cays in a rescue boat and also canvassed the airport, the homeless shelters, the beaches, and the hospitals, and interviewed captains who came in and out of the island's marinas. He went to the morgue and looked at ten unclaimed bodies. None of them were Hannah.

Hannah's friends developed a range of theories for what had happened, all of which they acknowledged were unlikely. But her survival in New York had been improbable, too. One friend from St. Thomas said, "There are pockets of communities in the bush, and she could be living there." Others thought that Hannah, who is fluent in Spanish, might have got on a boat to Puerto Rico or St. Croix or Miami without I.D. and integrated into a community of displaced people. "Even if she doesn't have a grip on her past, she's still Hannah, and she's probably doing what she can to be of service to the people around her," Roesle, her ex-boyfriend, said. Hannah Wood said, "Even if she's not aware that she's herself, she's a very charming person. If someone was inclined to do a good deed, she'd be the kind of person who would persuade someone to do it."

After her first fugue, Hannah gave her mother "Traveling with Pomegranates: A Mother-Daughter Story," a memoir framed as a modern version of the myth of Persephone and Demeter. Hannah rarely spoke about her fugue, but Barbara was touched by what she felt was an allusion to the experience. Demeter searches the earth for her daughter, Persephone, who has been taken into the underworld. "I remember reading that Persephone falls into an abyss, and that just hit something close to my heart," Barbara said. Even when Persephone is saved, Hades requires that she return to the underworld for a portion of each year. With each fugue, Barbara found more solace in what she described as "the primal archetype of the daughter descending and the mother seeking her, whatever that takes."

After Bradley's search failed to turn

up any bodies, Barbara's clearness committee, a group of Quakers appointed to guide someone facing a dilemma, bought her a one-way ticket to St. Thomas. She asked the Red Cross if she could do volunteer work in exchange for a bed. "I didn't want to take up precious resources," she said. The Red Cross put her in touch with the owner of the Windward Passage Hotel, in downtown St. Thomas, which was providing rooms to recovery workers and hotel employees who had lost their homes in the storms.

Barbara arrived on the island on November 21st, more than two months after Hannah disappeared. Her room looked out on the part of the harbor where seaplanes take off. The cruise ships had begun to return, and the businesses devoted to their passengers—on a street behind the hotel were Dynasty Dazzlers, Ballerina Jewelers, Jewels Forever, and a dozen other jewelry stores—were reopening.

Barbara is constitutionally optimistic, and she tried to cast away the idea of negative outcomes. She drove Hannah's car—a black Suzuki, whose back window had been blown out by Hurricane Irma—and went to Hannah's favorite beaches, restaurants, and shops. "I do have the sense sometimes that she's around any corner," Barbara told me. She talked to Hannah's friends and colleagues, trying to understand her last known interactions. Barbara believed that this fugue, too, may have started with a prelude in which Hannah was still home and communicating with people in a rudimentary way, without encoding the interactions into memory.

Barbara called Richard Loewenstein, the psychiatrist who specializes in fugues, and was struck by his conviction that dissociative fugues are organized and purposeful, operating according to some internal logic. The person's thinking is dominated by a "single idea that symbolizes or condenses (or both) several important ideas and emotions," Loewenstein writes.

Barbara tried to imagine what thought could be motivating her daughter to journey to water. She contemplated the symbolism of baptism. "One rises from the water reborn," she said. But, in the United Methodist tradition in which Hannah was raised, believers are not required to be fully immersed. Barbara also considered the imagery of creation in the Old Testament. "The water is a vast chaos, formless—a void," she said. "Could it be a kind of metaphor for the primeval chaos out of which creation comes?" The description in Genesis reads, "Now the earth was formless and empty, darkness was over the surface of the deep, and the spirit of God was hovering over the waters." But, Barbara added, "we don't generally get so literal about it as to charge off into the briny deep or the creek."

She said that, one day, shortly before she filed for divorce, she, too, had entered a kind of dissociative state, in part, she believes, in response to a medication that she had just started taking. She had been on her way to teach a class, at a United Methodist church, about the women who worshipped at the church at Corinth. The women's existence is recorded only because Paul admonished them for preaching and prophesying in public. "The husband is the head of his wife," he wrote.

The last thing Barbara remembered was driving south on the highway. She found herself beside the Willamette River. "Why did I go to the water?" she asked. "I do remember feeling comfort finding myself there." She sat in her car for several hours. "I had lost the ability to understand categories," she said. "I no longer had a chronological measure of time. I no longer experienced myself in a specific place. I didn't have an understanding of the mechanisms by which this world fits together." After several hours, she drove home. She said, "I fully came to when I saw my children's faces, and I thought, Oh, my God—they're worried."

The front-desk manager of the Windward Passage Hotel, Vedora Small, is a middle-aged mother from St. Thomas whose home was destroyed in the storm and who lives in a room on the same floor of the hotel as Barbara. She often lies in bed at night wondering where Hannah could be. "I know St. Thomas is a small place and it looks simple," Small told me. "But you can live here for years and I don't see you and you don't see me."

Small took Barbara to shelters and abandoned buildings where people who are homeless or mentally disturbed often turn up. On the island, there are only thirty-two beds for psychiatric patients—the shortage is so severe that a judge recently ordered a mentally ill man to live in his pickup truck—and a large number of people are chronically adrift. After the storms, more people joined their ranks. Barbara was repeatedly directed to the



"All I can tell you is they ran it by some focus groups and now we're the three little pugs."

same circuit of buildings: a night club downtown that had been the site of several crimes, a car wash on a side street near Frenchtown, and a house where people from the car wash always told her to go. It was owned by a man who was rarely home. Under his door, Barbara slipped a flyer with Hannah's face on it that warned she "may not know who she is."

When I visited these sites with Barbara, people who were drunk, high, or unhinged seemed to engage with reality for long enough to tell her that they were praying for her. One woman, who was struggling to stay upright, told Barbara, "I love you, you will find her—even if she's dead, you're still going to find her." A woman who worked at a farm on the Estate Bordeaux, a former sugar plantation, said that she understood why someone might forget her identity during the storm. "There was a lot of trauma," she said softly. "It cracked things wide open." A man making hamburgers at the bar at Sapphire told Barbara that a few people had drowned near the beach in the past. "I don't think she went out into the water," he said. "Everything that goes out comes back this way. She would have washed up already."

Every few weeks, there was another sighting. It was often the same women: a white teacher at a different private school on the island, or an older, homeless woman from Massachusetts who panhandled in an open-air mall near the marina.

On January 23rd, two caseworkers at the Bethlehem House Shelter for the Homeless, in downtown St. Thomas, reported that they had just seen Hannah at an abandoned building where people often smoked crack. Barbara and a detective from the Virgin Islands Police Department, Albion George, drove to a peach-colored, crumbling three-story structure close to Market Square, a produce market that was once the site of some of the largest slave auctions in the world. They climbed a steep flight of concrete steps with no railings. Detective George reached the third floor and saw the woman. "I thought, My God, that's her," he told me. "My heart was beating. I grabbed her right away and handcuffed her."

The woman was thin and had acne, and her light-brown hair was in a bun. Her eyes were a striking sea green. Barbara reached the top of the stairs a minute later, and told George that it was not Hannah. The woman was shouting about police accountability—she said that she needed George's badge number. George went to release the handcuffs, and Barbara touched the woman's shoulder and apologized over and over. She explained that she was searching for her daughter. The woman had seen the flyers for Hannah. She told Barbara, "I wish I were her for you."

An emergency call came over George's radio, but Barbara was reluctant to leave. She was moved by the woman's compassion and wondered if her mother was looking for her, too. After she returned to the hotel, she wished she could go back and help the woman somehow. She realized that in the time it had taken to drive to the building and climb to the top she had conditioned herself to fully accept a daughter who would find herself in such surroundings. "That sort of gift is at the heart of religion," she told me. "To love your neighbor as yourself. To love that woman as I love Hannah."

Barbara went to a number of religious services on the island, including at the Reformed church, at the Methodist church, and at the island's only Jewish temple, built in 1833 by Spanish and Portuguese settlers. It is one of the oldest synagogues in the Western Hemisphere. Barbara started going to services every Sabbath, and described the synagogue as an "unlikely spiritual home in the wilderness." The tile floor of the temple was covered in sand; according to legend, the sand symbolized the desert in which the Israelites wandered for forty years.

On a recent Sabbath, the rabbi, a transplant from Chevy Chase, Maryland, warmly welcomed Barbara. He had added Hannah's name to the list of people whose recovery the congregation prayed for every week. By most counts, Hannah is one of five people still missing in the Virgin Islands in the wake of the storms. When the rabbi recited the prayer for healing, Barbara closed her eyes and bowed her head, remaining motionless long after it had ended. For much of the sermon, she gazed at the temple's domed ceiling. The rabbi's words were punctuated by frogs chirping outside the open door.

At the end of the service, we were all asked to stand in a circle and greet the person next to us. There were about twenty people there, most of them wearing shorts and sandals. Barbara introduced herself to a blond woman, a tourist, and explained why she was on the island. The woman said, automatically, "That's terrible."

After the service, Barbara and I went to dinner, and she seemed unusually deflated. "There's a whole range of how people deal with the unknown," she said. Hannah's father told me in an e-mail, "I am sure that Hannah is alive . . . but I do not know IF she is 'Safe in the Arms of Jesus' or IF she is still walking around on this earth with the rest of us."

When Barbara feels impatient for an answer, she reminds herself of a Quaker adage: "Live up to the light thou hast, and more will be granted thee." The quest for her daughter—she described it as "navigating the realms of the watery unknown"—seemed to have also become a kind of end in itself. She and Hannah have always been close, but she felt she was accessing new facets of her daughter's experience. "Sometimes, when I come to the end of the day, I just have to take some deep breaths, remember the things I heard, and be grateful for them and let them go," she told me. "I have to realize that no matter how much I know about her, no matter how much more I learn, there's still a mystery."

Hannah's two closest friends told me that they wondered if Barbara would stay on the island forever. She often described phases of her life using the word "journey," and the search for her daughter had taken on a new dimension: she was connecting with the many lost women on the island who were not Hannah. "I need to be here, and I trust I'll know when I need to be back home," she told me. She felt that she was still piecing together clues and connections. She quoted a line from an Emily Dickinson poem, one of her favorites: "Not knowing when the dawn will come / I open every door." ♦

ANNALS OF THOUGHT

Mind Expander

Andy Clark believes that your thinking isn't all in your head.

BY LARISSA MACFARQUHAR

Where does the mind end and the world begin? Is the mind locked inside its skull, sealed in with skin, or does it expand outward, merging with things and places and other minds that it thinks with? What if there are objects outside—a pen and paper, a phone—that serve the same function as parts of the brain, enabling it to calculate or remember? You might say that those are obviously not part of the mind, because they aren't in the head, but that would be to beg the question. So are they or aren't they?

Consider a woman named Inga, who wants to go to the Museum of Modern Art in New York City. She consults her memory, recalls that the museum is on Fifty-third Street, and off she goes. Now consider Otto, an Alzheimer's patient. Otto carries a notebook with him everywhere, in which he writes down information that he thinks he'll need. His memory is quite bad now, so he uses the notebook constantly, looking up facts or jotting down new ones. One day, he, too, decides to go to MOMA, and, knowing that his notebook contains the address, he looks it up.

Before Inga consulted her memory or Otto his notebook, neither one of them had the address "Fifty-third Street" consciously in mind; but both would have said, if asked, that they knew where the museum was—in the way that if you ask someone if she knows the time she will say yes, and then look at her watch. So what's the difference? You might say that, whereas Inga always has access to her memory, Otto doesn't always have access to his notebook. He doesn't bring it into the shower, and can't read it in the dark. But Inga doesn't always have access to her memory, either—she doesn't when she's asleep, or drunk.

Andy Clark, a philosopher and cognitive scientist at the University of Edinburgh, believes that there is no important difference between Inga and Otto, memory and notebook. He believes that the mind extends into the world and is regularly entangled with a whole range of devices. But this isn't really a factual claim; clearly, you can make a case either way. No, it's more a way of thinking about what sort of creature a human is. Clark rejects the idea that a person is complete in himself, shut in against the outside, in no need of help.

How is it that human thought is so deeply different from that of other animals, even though our brains can be quite similar? The difference is due, he believes, to our heightened ability to incorporate props and tools into our thinking, to use them to think thoughts we could never have otherwise. If we do not see this, he writes, it is only because we are in the grip of a prejudice—"that whatever matters about *my* mind must depend solely on what goes on inside my own biological skin-bag, inside the ancient fortress of skin and skull."

One problem with his Otto example, Clark thinks, is that it can suggest that a mind becomes extended only when the ordinary brain isn't working as it should and needs a supplement—something like a hearing aid for cognition. This in turn suggests that a person whose mind is deeply linked to devices must be a medical patient or else a rare, strange, hybrid creature out of science fiction—a cyborg. But in fact, he thinks, we are all cyborgs, in the most natural way. Without the stimulus of the world, an infant could not learn to hear or see, and a brain develops and rewires itself in response to its environment throughout its life. Any human who uses language to think with has already incorporated an external device into his most intimate self, and the connections only proliferate from there.

In Clark's opinion, this is an excellent thing. The more devices and objects there are available to foster better ways of thinking, the happier he is. He loves, for instance, the uncanny cleverness of online-shopping algorithms that propose future purchases. He was the last fan of Google Glass. He dreams of a future in which his refrigerator will order milk, his shirt will monitor his mood and heart rate, and some kind of neurophone connected to his cochlear nerve and a microphone implanted in his jaw will make calling people as easy as saying hello. One day, he lost his laptop, and felt so disoriented and enfeebled that it was as if he'd had a stroke. But this didn't make him regret his reliance on devices, any more than he regretted having a frontal lobe because it could possibly be damaged.

The idea of an extended mind has itself extended far beyond philosophy, which is why Clark is now, in his early sixties, one of the most-cited philosophers alive. His idea has inspired research in the various disciplines in the area of cognitive science (neuroscience, psychology, linguistics, A.I., robotics) and in distant fields beyond. Some archeologists now say that when they dig up the remains of lost civilizations they are not just reconstructing objects but reconstructing minds. Some musicologists say that playing an instrument involves incorporating an object into thought and emotion, and that to listen to music is to enter into a larger cognitive system comprised of many objects and many people.

Clark not only rejects the idea of a sealed-off self—he dislikes it. He is a social animal: an eager collaborator, a convener of groups. The story he tells of his thinking life is crowded



Clark says that our minds extend out into the world, incorporating tools and other minds in order to think.

PHOTO-ILLUSTRATION BY ALMA HASER

with other people: talks he's been to, papers he's read, colleagues he's met, talks they've been to, papers they've read. Their lives and ideas are inextricable from his. His doors are open, his borders undefended. It is perhaps because he is this sort of person that he both welcomed the extended mind and perceived it in the first place. It is clear to him that the way you understand yourself and your relation to the world is not just a matter of arguments: your life's experiences construct what you expect and want to be true.

Clark seeks fusion with the world in everything he does. Most of his cars—a 1965 Triumph Herald, a 1968 Ford Thunderbird, a 1971 MG Midget, among others—have been convertibles. "On a sunny day, or just a non-rainy day, I feel trapped in a car if I can't get rid of the roof," he says. "Though I fear that you always look a bit of a plonker with the top down, so it's important to choose cars that are quirky rather than flashy." He loves electronic music, and one of his favorite things to do is go dancing. "I love the steamy, sweaty vibe of a hard-techno club," he says, "the way you can get totally lost in a sea of light, flesh, and music." Anyone who has gone clubbing with him can see that he feels the line between himself and everything else to be very thin. "After a few drinks, Andy's personality totally opens up," David Chalmers, a philosopher at N.Y.U., says. "In that moment, he is just *so* sweet and *so* lovable, and he does kind of merge with the world—everything is wonderful, everything is great! I think of that as his genuine nature, and the sober, reserved version during the day is just a proto version that is waiting for this true essence to be unlocked."

Clark is tall and spindly and moves in a hoppy, twitchy way, like a shorebird. His hair is a kind of punk mullet—spiky and gray on top, pink and a bit longer in the back. He likes costumes—he recently appeared at a birthday party as David Bowie from the "Space Oddity" period. Even at the office, his shirts are heroic, psychedelic, the shirts of a man who trusts the world, their effect muted only slightly by his black hoodie, black jeans, and black boots. When he agreed, somewhat reluctantly, to take on the administrative role of department chair, ten years ago, he made up for it by treating himself to a large, comic-book-style, undersea-themed tattoo.

Cognitive science addresses philosophical questions—What is a mind? What is the mind's relationship to the body? How do we perceive and make sense of the outside world?—but through empirical research rather than through reasoning alone. Clark was drawn to it because he's not the sort of philosopher who just stays in his office and contemplates; he likes to visit labs and think about experiments. He doesn't conduct experiments himself; he sees his role as gathering ideas from different places and coming up with a larger theoretical framework in which they all fit together. In physics, there are both experimental and theoretical physicists, but there are fewer theoretical neuroscientists or psychologists—you have to do experiments, for the most part, or you can't get a job. So in cognitive science this is a role that philosophers can play.

Most people, he realizes, tend to identify their selves with their conscious minds. That's reasonable enough; after all, that is the self they know about. But there is so much more to cognition than that: the vast, silent cavern of underground mental machinery, with its tubes and synapses and electric impulses, so many unconscious systems and connections and tricks and deeply grooved pathways that form the pulsing substrate of the self. It is those primal mechanisms, the wiring and plumbing of cognition, that he has spent most of his career investigating. When you think about all that fundamental stuff—some ancient and shared with other mammals and distant ancestors, some idiosyncratic and new—consciousness can seem like a merely surface phenomenon, a user interface that obscures the real works below.



Thirty years ago, Clark heard about the work of a Soviet psychologist named Lev Vygotsky. Vygotsky had written about how children learn with the help of various kinds of scaffolding from the world outside—the help of a teacher, the physical support of a parent. Clark started musing about the ways in which even adult thought was often scaffolded by things outside the head. There were many kinds of thinking that weren't possible without a pen and paper, or the digital equivalent—complex mathematical calculations, for instance. Writing prose was usually a matter of looping back and forth between screen or paper and mind: writing something down, reading it over, thinking again, writing again. The process of drawing a picture was similar. The more he thought about these examples, the more it seemed to him that to call such external devices "scaffolding" was to underestimate their importance. They were, in fact, integral components of certain kinds of thought. And so, if thinking extended outside the brain, then the mind did, too.

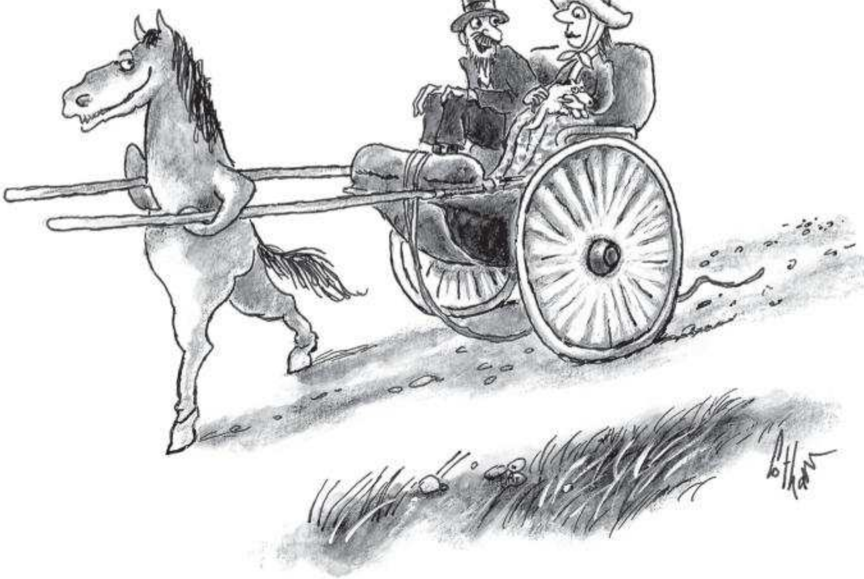
He wrote a paper titled "Mind & World: Breaching the Plastic Frontier," and gave it to David Chalmers, who was then a young postdoctoral fellow. Chalmers was taken with the idea, and gave the paper back scribbled all over with notes, pushing Clark, among other things, to expand his notion of cognition not only to inanimate objects but to people as well. "You need a nifty name for your position," Chalmers wrote. " 'Coupled externalism'? Or 'The Extended Mind' . . . or something along those lines." Clark liked Chalmers's comments, and they decided to rewrite the article together. They worked so closely that the finished product was, they both felt, a nice example of extended cognition in itself. They called it "The Extended Mind," by Andy Clark and David Chalmers; a note explained that the authors were listed in order of degree of belief in the paper's thesis.

When the paper first circulated, in 1995, many found it outlandish. But,

as the years passed, and better devices became available, and people started relying on their smartphones to bolster or replace more and more mental functions, Clark noticed that the idea of an extended mind had come to seem almost obvious. The paper became the most-cited philosophy paper of its decade. The philosopher Ned Block likes to say that the extended-mind thesis was false in 1995 but is true now.

After the paper was published, Clark began thinking that the extended mind had ethical dimensions as well. If a person's thought was intimately linked to her surroundings, then destroying a person's surroundings could be as damaging and reprehensible as a bodily attack. If certain kinds of thought required devices like paper and pens, then the kind of poverty that precluded them looked as debilitating as a brain lesion. Moreover, by emphasizing how thoroughly everyone was dependent on the structure of his or her world, it showed how disabled people who were dependent on things like ramps were no different from anybody else. Some theorists had argued that disability was often a feature less of a person than of a built environment that failed to take some needs into account; the extended-mind thesis showed how clearly this was so.

Clark recognized that there could be problems with a cyborg existence. The same algorithms that were so helpful in recommending music could intrude in creepy ways, and a world in which minds were constantly merging was also one that threatened to destroy privacy altogether. But maybe that would be a good thing, he thought—maybe privacy was mostly secrecy, and the airing of secrets would make human variety so visible that it would come to be more accepted. "As the lives of the populace become more visible, our work-a-day morals and expectations need to change and shift," he wrote. "As the realm of the truly private contracts, as I think it must, the public space in any truly democratic country needs to become more liberal and open-hearted." He was optimistic that things would work out in the end. "Where some fear disembodiment and social isolation," he wrote, "I anticipate *multiple* embodiment and social *complexity*."



"Why, I think he's trying to impress you."

He did not feel the need to become a cyborg in a literal way—for the moment, he was content with detachable, non-penetrative devices. What mattered for the merging of self and world was the incorporation of a thing into cognition, not into a body. But he was fascinated by Kevin Warwick, a professor in the Department of Cybernetics at the University of Reading, who had acquired the nickname Captain Cyborg. Warwick had implanted a silicon chip in his left arm which emitted radio signals that caused doors in his office to open and close and lights and heaters to switch on and off as he moved around. It felt to Warwick that he had become one with his small world, part of a harmoniously synchronized larger system, and the feeling was so pleasant that when it came time to remove the implant he found it hard to let go.

Later, in New York, by means of another, more complex implant in his arm, Warwick connected the nerve fibres in his wrist and hand to a computer. Over the Internet, he was able to control a robot hand back in Reading, and even to feel things that the robot hand was touching. Encouraged, Warwick persuaded his wife, Irena, to have an implant put in her arm as well, creating the first purely electronic communication between two human nervous systems. It could work over the Internet. It was the first step, he claimed, toward telepathy.

Many people found Warwick extremely annoying, a buffoonish publicity seeker, but Clark loved his cyborgian ambition, his desire to merge inside and out, even more profoundly than they were merged already. He was particularly drawn to Warwick's idea of electronically mediated intimacy. How much farther could it be taken? he wondered. How intimate could two people get? Could two brains be connected in such a way as to coördinate some joint activity, such as dancing? It seemed distinctly possible. After all, the brain already consisted of two hemispheres linked by a dense bridge of neurons. And brains were known to be amazingly plastic, even late in life. "Who knows," he wrote, "what new skilled forms of interpersonal and neuroelectronic harmony may emerge?"

Clark lives on two upper stories of a big old Edinburgh row house with his partner, Alexa Morcom, a cognitive neuroscientist who studies memory. He was delighted to discover,

when he first met Morcom's parents, that her great-uncle was Christopher Morcom, the first love of Alan Turing, one of the founders of computer science. Clark and Morcom have filled their apartment with a riot of small plastic objects—"Star Trek" action figures, action figures in tiny tutus, mini robots, bigger robots, Daleks from "Doctor Who," dolls, manikin torsos, as well as shelves and shelves of old records and DVDs. In the hall is a grandfather clock with a Barbie sitting behind glass where the clock face used to be, and on either side of the television in the living room is a pair of manikin legs. Behind the sofa stands a nearly life-size palm tree, made of strings of green lights, which used to stand next to Clark's beloved Jacuzzi when he lived in Bloomington, teaching at Indiana University. He knew that he wouldn't have a Jacuzzi in Edinburgh, so he brought the tree home to remind him of it.

On the stair landing between the two floors is an incongruous gesture to emptiness—a Buddha head and a few stones. Morcom meditates regularly and goes on meditation retreats. Clark has tried meditation a couple of times, but he finds that he just sits there and doesn't get much out of it.

He is not really the emptiness type. He loves stuff—he welcomes it into his mind and into his house. He loves technology, and he loves old things, and he loves old technology most of all. His favorite movie is "Brazil"—a romantic tale set in a future automated by such endearingly retrograde technology as pneumatic tubes and mechanical breakfast-makers. Once, years ago, he gave a talk in Los Alamos and was taken to the Black Hole, a store that sold defunct scientific equipment that had been bought in bulk from the National Laboratory by the store's owner, a nuclear-weapons technician turned peace activist. Clark was dazzled by the merchandise—"heavyweight first-generation calculating machinery . . . cathode-ray tubes . . . gray, heavy, metal boxes (rather like office filing cabinets) with enormous single red buttons, labeled EMERGENCY." He bought as much as he could carry, including, he remembered later, "two black boxes full of inscrutable, but wisely glowing, valve electronics."

Fortunately for Clark, Morcom shares his taste in home décor, and she, too, is an adventurous dresser. But their work personalities are quite different.

"I tend to be a bit of a critic," Morcom said.

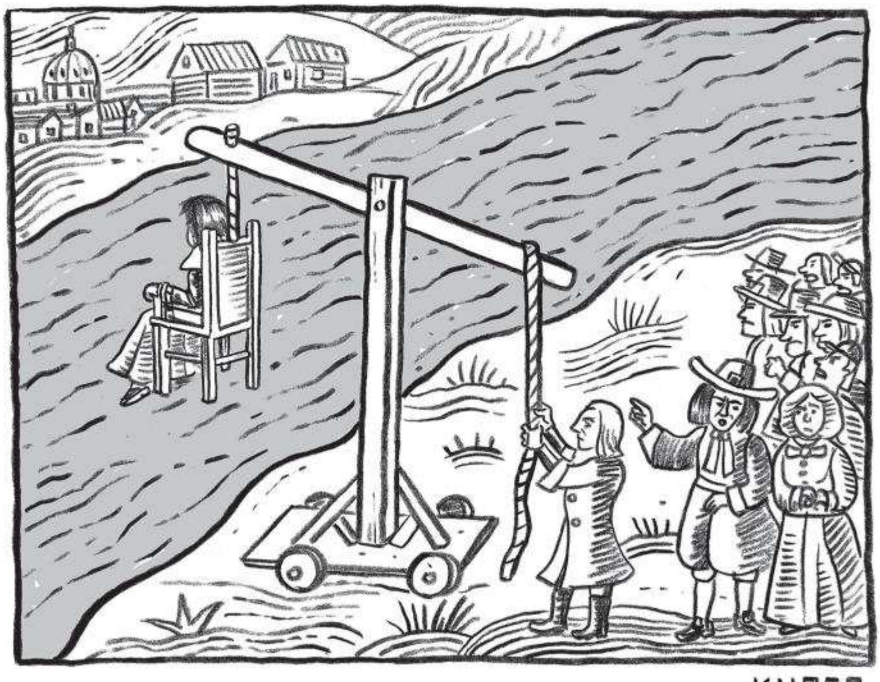
"You're more of a critic than me."

"In my field, there's a lot of big ideas, but I'm more the person that comes along and wants to test them and see if they're useful."

"I think I'm more of a synergizer," Clark said. "I like to see a bunch of things and see how they might fit together into a story, and the more bits of human experience that story can touch the more I'm going to like it. But I think that's how science works: some people need to run with a thing to see where they can take it; other people need to be skeptical and push back against them. I'm the one who picks it up and runs with it." He tends to get along with people who criticized his ideas. After all, he's grateful that they were writing about his work.

"Without your critics, you've not got a career," he said.

"Exactly," Morcom said. "It means nobody's paying attention to you. Whereas in science there's a whole row going on about criticizing people in public. The number of times that I've seen people give talks and people are thinking, That's bollocks, absolute shit data, and no one brings it up."



"If she floats, she's a witch. If she sinks, maybe she had a point about women's rights."

Clark grew up in a working-class neighborhood in South London. His father was a policeman who loved mathematics; his mother was a housewife who wrote poems and articles for the local paper. Clark was the first in his family to go to university. The idea came up only because a priest suggested it; his father thought customs and excise would be a sound career choice. As a kid, he spent most of his time reading Marvel comics. He was less interested in reading ordinary fiction; he didn't find, as some people do, that writing called up images in his mind, whereas with comics all the bright pictures he could want were right out there on the page.

When he went to university, at Stirling, in Scotland, he planned to study French literature—he'd quite enjoyed reading Sartre and Camus in high school—but once there he got drawn into philosophy. He found that he was

good at logic, and, when it dawned on him that philosophy was something you could actually do for a living, he went on to get his Ph.D., in philosophy of mind, while living in London, with a couple of people who sold the *Socialist Worker*, in a grotty flat on the Isle of Dogs.

After he finished his Ph.D., in the early nineteen-eighties, he got a job as a temporary lecturer at Glasgow University, where he taught arguments for the existence of God. It wasn't really his thing, the existence of God, but that was the opening there was. Meanwhile, he taught a night class on the mind and artificial intelligence, and began to read about what became known later as GOFAI—Good Old Fashioned A.I. GOFAI created a kind of machine intelligence by programming computers with a knowledge base of symbols, and algorithms to manipulate them. GOFAI had proved quite successful at solving certain sorts of problems—problems requiring logic and precision, the kind that humans tended to find difficult. But it was very distant from the cognition you might find in a real animal. Humans could do logic problems, but usually only with the help of tools, like pen and paper. He began to wonder whether GOFAI had made a fundamental error, mistaking what a tool-using mind could do for the cognition of a brain alone.

At the time, the discrepancy between symbolic A.I. and animal cognition didn't necessarily seem like an issue. GOFAI people weren't trying to build animals—they were trying to build intelligence. The thought was that the mind was a kind of software program, and the body and the brain were just hardware, so there was no reason in principle that cognition couldn't be reproduced on a different kind of hardware—on a silicon-based machine, say, rather than on carbon-based flesh. For this purpose, you didn't need all the other equipment that came with animals—arms, legs, lungs, heart. Lurking behind this thesis was the mostly unspoken hope that if you could upload a mind onto a computer then that mind could be preserved and its owner would not die.

Clark found it liberating to imagine minds freed from their ordinary, meaty bodies, but GOFAI felt a bit too intellectual, a bit too high up. The symbolic A.I. systems were powerful, but they were also quite brittle—if some small thing went wrong, they didn't work at all. Then, a couple of years later, in the mid-eighties, he heard about a new approach to A.I. called connectionism. Connectionists took a different tack, by attempting to simulate the way that millions of neurons, each of which was very simple and responded only to its immediate neighbors, combined in the brain to produce complex cognition. Instead of programming an artificial neural network with symbolic knowledge, a language that was complete from the get-go, the idea was to see if artificial networks could learn, a little at a time, building on very simple beginnings. And, indeed, the new neural networks appeared to be much more flexible and robust than the symbolic systems had been—they could survive damage and noise. And because they worked simultaneously along multiple parallel paths, instead of in one orderly serial, they were much faster.

The artificial networks seemed closer to human cognition than GOFAI was, and at first Clark found that very exciting. But despite the early hopes of the connectionist programmers the results were disappointing. "Where are the artificial minds promised by 1950s science fiction and 1960s science journalism?" he wrote. "Why are even the best of our 'intelligent' artifacts still so unspeakably, terminally dumb? One possibility is that we simply misconstrued the nature of intelligence itself. We imagined mind as a kind of logical reasoning device coupled with a store of explicit data—a kind of combination logic machine and filing cabinet." He suspected that much of A.I. was marshalling the increasing power and abilities of computers and steering them determinedly in the wrong direction.

He came to believe that if you were going to figure out how intelligence worked you had always to remember the particular tasks for which it had evolved in the first place: running away from predators and toward mates and food. A mind's first task, in other words, was to control a body. The idea of pure thought was biologically incoherent: cognition was always embodied. In the early days of A.I., intelligence had for the most part been talked about as the ability to do things that A.I. researchers found hard, like proving theorems and playing chess. Things that small children found easy, such as walking around without bumping into walls, or telling the difference between a stuffed animal and a table, were not thought of as requiring any interesting sort of intelligence at all. But then some researchers started to build robots, and they discovered that programming childlike skills like walking was actually extremely difficult—harder than chess.

In the mid-nineteen-nineties, when he was teaching at Washington University in St. Louis, Clark decided that he, too, needed a few robots to think with. He had always loved robots—the uncanniness of a machine that behaved like something alive. The robots he had were very simple and easy to program: they looked like little doughnuts on wheels. But, when it came to robots, simplicity was not always a bad thing. In fact, the unexpected virtue of simplicity was one of the most important lessons that had emerged from robotics.

Some years before, Clark had watched old black-and-white films of Elmer and Elsie, two small robots that an American inventor named William Grey Walter had built in the nineteen-forties out of vacuum tubes, motors, and gears from old gas meters. Elmer and Elsie were about the size of tortoises, and moved slowly, like tortoises; he designed a tortoise-shaped shell that accentuated the resemblance, leaving only a light-sensor head sticking out of the top. The little robots had a limited repertoire of behaviors: they were programmed to move toward light, and, when they bumped into an obstacle, to move about in random directions until they found a way forward. But although they were mechanically simple, they were surprisingly unpredictable. Because the world that Walter put them in was complicated,

their behavior was complicated. They seemed like animals. It felt natural to use anthropomorphic terms for what they were doing: searching, hesitating, recoiling, running away.

Later, robots became far more complex. In the nineteen-sixties, a group at Stanford built a human-size robot named Shakey, which could move around an obstacle course and perform an assigned task, such as pushing a block from one room to another. Shakey was equipped with a camera and controlled by a remote computer that had been preprogrammed with a complete two-dimensional map of Shakey's world. Whereas Elmer and Elsie set forth in ignorance and reacted in a few simple ways to whatever obstacle they encountered, Shakey planned its journey carefully, one step at a time. After it moved a short distance, or encountered a block, it would stand perfectly still for several minutes while its computer brain, assimilating the positioning information fed to it by the camera, calculated its next move. Shakey was more intelligent than Elmer and Elsie, but also more rigid, and infinitely slower. It did not behave like an animal at all. An animal that stopped for five minutes to calculate its next move was a dead animal.

In St. Louis, Clark started reading around in robotics. He discovered an Australian roboticist at M.I.T. named Rodney Brooks who had been thinking along the same lines as he had: maybe trying to install a ready-made higher intelligence was misguided. Maybe the way to go was building an intelligence that developed gradually, as in children—seeing and walking first. Perhaps intelligence of many kinds, even the sort that solved theorems and played chess, emerged from the most basic skills—perception, motor control. While constructing a robot that he called Allen, Brooks decided that the best way to build its cognition box was to scrap it altogether. Allen was more complex than Elmer and Elsie. It was controlled by three objectives—avoid obstacles, wander randomly, seek distance—layered in a hierarchy, such that the higher could override the lower. But Allen would not know, as Shakey had known, what it was heading toward. It would make no plans. It would simply encounter the world and react.

Robots like Allen, and Elmer and Elsie before it, seemed to Clark to represent a fundamentally different idea of the mind. Watching them fumble about, pursuing their simple missions, he recognized that cognition was not the dictates of a high-level central planner perched in a skull cockpit, directing the activities of the body below. Central planning was too cumbersome, too slow to respond to the body's emergencies. Cognition was a network of partly independent tricks and strategies that had evolved one by one to address various bodily needs. Movement, even in A.I., was not just a lower, practical function that could be grafted, at a later stage, onto abstract reason. The line between action and thought was more blurry than it seemed. A creature didn't think in order to move: it just moved, and by moving it discovered the world that then formed the content of its thoughts.

The world is a cacophony of screeches and honks and hums and stinks and sweetness and reds and grays and blues and yellows and rectangles and polyhedrons and weird irregular shapes of all sorts and cold surfaces and slippery, oily ones and soft, squishy ones and sharp points and edges; but somehow all of this resolves crisply into an orderly landscape of three-dimensional objects whose qualities we remember and whose uses we understand. How does this happen? The brain, after all, cannot see, or hear, or smell, or touch. It has a few remote devices—the eyes and ears and nose, the hands farther away, the skin—that bring it information from the world outside. But these devices by themselves only transmit the cacophony; they cannot make sense of it.

To some people, perception—the transmitting of all the sensory noise from the world—seemed the natural boundary between world and mind. Clark had already questioned this boundary with his theory of the extended mind. Then, in the early aughts, he heard about a theory of perception that seemed to him to describe how the mind, even as conventionally understood, did not stay passively distant from the world but reached out into it. It was called predictive processing.

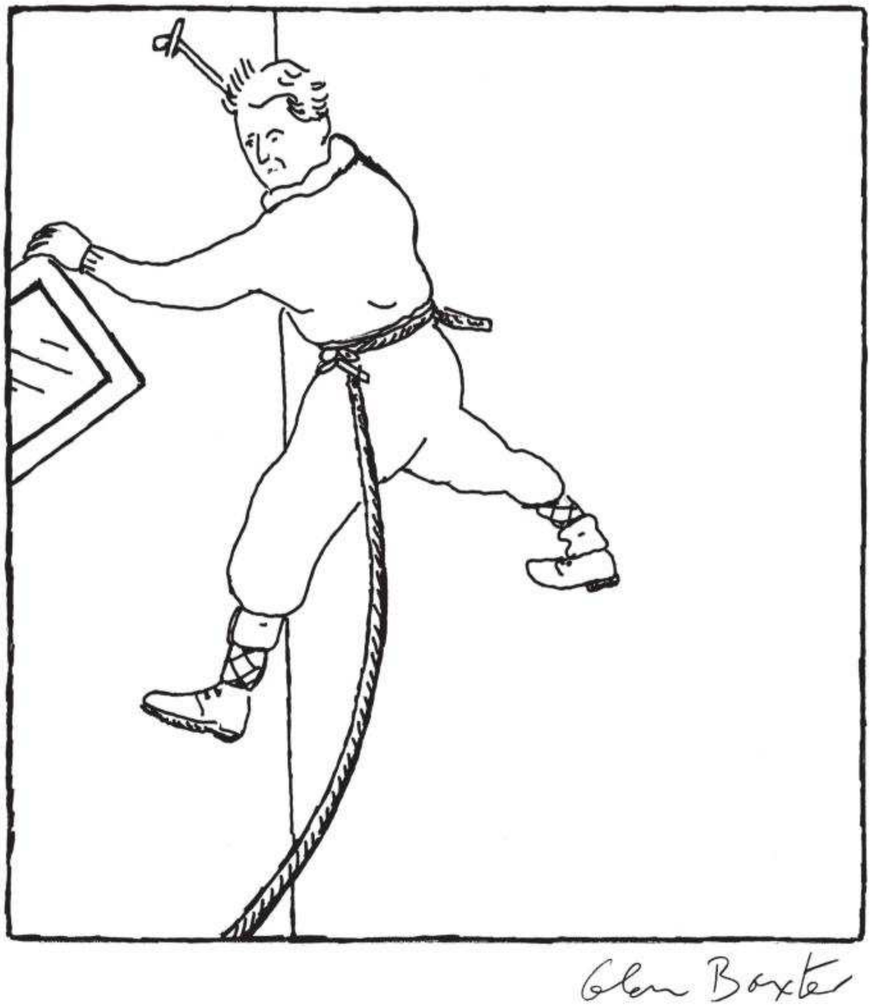
Traditionally, perception was thought to work from the bottom up. The eyes, for instance, might take in a variety of visual signals, which resolved into shapes and colors and dimensions and distances, and this sensory information made its way up, reaching higher and higher levels of understanding, until the thing in front of you was determined by the brain to be a door, or a cup. This inductive account sounded very logical and sensible. But there were all sorts of perceptual oddities that it could not make sense of—common optical illusions that nearly everyone was prone to. Why, when you saw a hollow mask from the inner, concave side, did it nonetheless look convex, like a face? Or, when one image was placed in front of your right eye—a closeup face, say—and a very different image, such as a house, was simultaneously placed in front of your left eye, why did you not perceive both images, since you were seeing both of them? Why, instead, did you perceive first one, then the other, as though the brain were so affronted by the preposterous, impossible sight of a face and a house that seemed to be the same size and exist in the same place at once that it made sense of the situation by offering up only one at a time?

It appeared that the brain had ideas of its own about what the world was like, and what made sense and what didn't, and those ideas could override what the eyes (and other sensory organs) were telling it. Perception did not, then, simply work from the bottom up; it worked first from the top down. What you saw was not just a signal from the eye, say, but a combination of that signal and the brain's own ideas about what it expected to see, and sometimes the brain's expectations took over altogether. How could it be that some people saw a dress as white and gold while others saw the same dress as blue and black? Brains did not perceive color straightforwardly: an experienced brain knew that an object would look darker and

less vivid in shade than in the sun, and so adjusted its perception of the "true" color based on what it judged to be the object's situation. (Psychologists speculate that a brain's assumptions about color may be set by whether a person spends more time in daylight or artificial light.) Perception, then, was not passive and objective but active and subjective. It was, in a way, a brain-generated hallucination: one influenced by reality, but a hallucination nonetheless.

This top-down account of perception had, in fact, been around for more than two hundred years. Immanuel Kant suggested that the mind made sense of the complicated sensory world by means of innate mental concepts. And an account similar to predictive processing was proposed in the eighteen-sixties by the Prussian physicist Hermann von Helmholtz. When Helmholtz was a child, in Potsdam, he walked past a church and saw tiny figures standing in the the belfry; he thought they were dolls, and asked his mother to reach up and get them for him: he did not yet understand the the concept of distance, and how it made things look smaller. When he was older, his brain incorporated that knowledge into its unconscious understanding of the the world—into a set of expectations, or "priors," distilled from its experience—an understanding so basic that it became a lens through which he couldn't help but see.

Being prey to some optical tricks—such as the hollow-mask illusion, or not noticing when a little word like "the" gets repeated, as it was three times in the previous paragraph—is a price worth paying for a brain whose controlling expectations make reliable sense of the world. Some schizophrenic and autistic people are strikingly less susceptible to the hollow-mask illusion: their brains do not so easily dismiss sensory information that is unlikely to be true. There are parallel differences with other senses as well. When neurotypical people touch themselves, it feels less forceful than an identical touch from another person, because the brain expects it—which is why it's hard to tickle yourself. Schizophrenics are better able to tickle themselves—and also more prone to delusions that their own actions are caused by outside forces.



ARTHUR WOULD DO ANYTHING TO AVOID MUESLI

One major difficulty with perception, Clark realized, was that there was far too much sensory signal continuously coming in to assimilate it all. The mind had to choose. And it was not in the business of gathering data for its own sake: the original point of perceiving the world was to help a creature survive in it. For the purpose of survival, what was needed was not a complete picture of the world but a *useful* one—one that guided action. A brain needed to know whether something was normal or strange, helpful or dangerous. The brain had to infer all that, and it had to do it very quickly, or its body would die—fall into a hole, walk into a fire, be eaten.

So what did the brain do? It focussed on the most urgent or worrying or puzzling facts: those which indicated something unexpected. Instead of taking in a whole scene afresh each moment, as if it had never encountered anything like it before, the brain focussed on the news: what was different, what had changed, what it didn't expect. The brain predicted that everything would remain as it was, or would change in foreseeable ways, and when that didn't happen error signals resulted. As long as the predictions were correct, there was no news. But if the signals appeared to contradict

WHO KNOWS ONE

Who knows One. I know One.
One is God for God is One—
The only One in Heaven and on earth.

Who knows two. I know two.
Two are the first two: Adam and Eve.
One is God for God is One—
It takes one to know one.

Who knows three. I know three.
Bad things always come in threes.
Two trees grew in the Garden of Eden.
One is God for God is One—
One rotten apple spoils the barrel.

Who knows four. I know four.
What were you doing on all fours?
Three's the hearts in a ménage à trois.
Two's the jump ropes in double Dutch.
One is God for God is One—
One good turn deserves another.

Who knows five. I know five.
Five is the five in "Slaughterhouse-Five."
Four is Egypt's plague of flies.
Three the Stooges on TV.
Two the two-faced lie he told.
One is God for God is One—
One hand washes the other.

Who knows six. I know six.
Six are the wives of Henry VIII.
Who? What? Where? When? Why?
Four the phases of the moon.
Three the bones inside the ear.
Two eyes—the better to see you with, my dear.
One is God for God is One—
There's only one to a customer.

Who knows seven. I know seven.
Seven the year of the seven-year itch.
Six the paper anniversary.
Asked if he did it, he pleaded the Fifth.
Four are my absent wisdom teeth.
Three is the three in the third degree.
Two can play that game.
One is God for God is One—
Public Enemy No. 1.

Who knows eight. I know eight.
The Beatles' "Eight Days a Week."
Wrath is the seventh of the deadly sins.
Six of one, half a dozen of the other.
He lost it all in five-card stud.
Four bits in a nibble equals half a byte.
Three is the beginning, middle, and end.
Two are the graves in the family plot.
One is God for God is One—
The only one in a hole in one.

Who knows nine. I know nine.
Nine are the lives of an average cat.
Eight is the day of circumcision.
Seven the locks on Samson's head.

the predictions—there is a large dog on your sofa (you do not own a dog)—prediction-error signals arose, and the brain did its best to figure out, as quickly as possible, what was going on. (The dog is actually a crumpled blanket.) This process was not only fast but also cheap—it saved on neural bandwidth, because it took on only the information it needed—which made sense from the point of view of a creature trying to survive.

But figuring out how to combine top-down predictions and bottom-up signals was not always easy. When prediction-error signals arose, the brain had to weigh two competing accounts of what was happening: the prediction and the new information. Which should it trust? Its priors, which had generated the prediction, had proved trustworthy in the past; and sometimes the information coming from the eyes wasn't reliable. Should it update its priors based on the new information? (There is a dog on the sofa—right there!) Or should it reject the information on the ground that it seemed highly likely to be wrong? (Dogs don't just appear out of nowhere inside apartments.) What the brain needed to do was figure out how probable it was that this particular prior was correct, and how probable it was that the new sensory information was correct, and crunch those two probabilities together to come up with an answer.

To Clark, predictive processing described how mind, body, and world were continuously interacting, in a way that was mostly so fluid and smoothly synchronized as to remain unconscious. He wrote a book on the subject titled "Surfing Uncertainty," and surfing was his metaphor for life: yes, the waves that the ocean threw up at you could be wild and cold and dangerous, but if you surfed over and over again, and went with the waves instead of resisting them, and trusted that you would be O.K., you could leave your self-conscious mind behind and feel a joyful sense of oneness with the world.

Clark saw the theory of predictive processing through the scrim of his optimistic personality. But it's not obvious that a theory emphasizing the uncertainty of perception—the way that the brain has to *infer* what is outside rather than straightforwardly taking it in—is a theory of oneness. To another philosopher who had taken an interest in predictive processing—

Six the sense I wish I had.
Five the five in nickeled-and-dimed.
Four cold feet in the double bed.
Three's a crowd.
Two's company.
One is God for God is One—
The only one in a one-night stand.

Who knows ten. I know ten.
I wouldn't touch that with a ten-foot pole.
She dressed to the nines.
Fellini's "8½."
Seven the times the bride circles the groom.
Six the number perfect in itself.
She daubed her wrists with Chanel No. 5.
Love is just a four-letter word.
Three is as phony as a three-dollar bill.
Two is the two in doubletalk.
One is God for God is One—
There's one born every minute.

Who knows eleven. I know eleven.
Eleven are the stars in Joseph's dream.
Ten is the Roman numeral X.
Possession is nine-tenths of the law.
Infinity's a sideways figure eight.
Seven long years Jacob had to wait.
Six is the Lover's Tarot card.
Five is indivisible.
Four, cruel April.
Three witches in "the Scottish play."
Two is the two of "I and Thou."
One is God for God is One—
One in the hand is worth two in the bush.

Who knows twelve. I know twelve.
Twelve are the face cards in a deck.
Eleven are the thieves in "Ocean's Eleven."
Take a deep breath and count to ten.
It takes nine tailors to make a man.
Eight are the people on Noah's ark.
Seven are the hues in a rainbow's arc.
Six is . . . I can't remember what.
Five the rivers of the Underworld.
Four the rivers of Paradise.
Three on a match.
It takes two to tango.
One is God for God is One—
In one ear and out the other.

Who knows thirteen. I know thirteen.
Thirteen is the skyscraper's missing floor.
Twelve are the men who walked on the moon.
At the eleventh hour, his life was spared.
Do not covet your neighbor's ass.
Nine are the circles of Dante's Hell.
Eight is the game of crazy eights.
The phone was busy 24/7.
They deep-sixed their love affair.
The five-o'clock shadow on your face.
Four is putting two and two together.
Three is the eternal triangle.
Two plays second fiddle.
Two minus one equals one.
One is one all alone.
You were my one and only one—
The only one whose number's up.

—*Jane Shore*

Jakob Hohwy, who taught at Monash University, in Melbourne—the theory emphasized, on the contrary, how very difficult it was for the brain to understand things outside itself. Clark saw the brain as travelling light, taking in only the news, only what it needed for its next move; but Hohwy saw how much heavy mental equipment was necessary to process even the briefest glance or touch. He wrote an essay for a forthcoming book titled "Andy Clark and His Critics," in which he proposed a counter-metaphor to Clark's joyful surfer: Nosferatu. The brain was like a vampire, shut in a coffin.

"A lot of us feel that we are not very much in tune with the world," Hohwy says. "The world hits us and we don't know what to do with the sensory input we get. We are constantly second-guessing ourselves, withdrawing, and trying to figure out what is happening. Something that is very familiar to a lot of people, certainly myself, is social anxiety. We are trying to infer hidden causes—other people's thoughts—from their behavior, but they are hidden inside other people's skulls, so the inference is very hard. A lot of us are constantly wondering, Did I offend that person? Do they like me? What are they thinking? Did I understand their intentions?" To Clark, the most noticeable thing about the mind was the way its understandings were so often swift and perfectly tailored to the body's needs; Hohwy noticed how often things went wrong. "I think a lot about mental illness," he says. "We forget what a high per cent of us have some mental illness or other, and they're all characterized by the internal model losing its robustness. One per cent of us have schizophrenia, ten per cent depression, and then there is autism. The server crashes more often than we think."

In 2008, Clark came across an article in *New Scientist* that described what purported to be a unified theory of the brain. The theory involved the predictive-processing ideas that he'd already been thinking about, but it was broader, explaining not just cognition and perception but also action with a single mechanism. Clark learned that this new theory had been conceived by a University College London professor, Karl Friston, the most-cited neuroscientist in the world. Friston had invented a statistical technique

for analyzing brain activity in neuroimaging experiments, but he regarded neuroimaging as his day job: he spent his weekends contemplating theoretical neurobiology. Friston called his idea the free-energy principle. Free energy, as Friston defined it, was roughly equivalent to what Clark called prediction error; and the brain's need to minimize free energy, or minimize prediction error, Friston believed, drove everything the brain did.

Clark and Friston met and started talking. Previously, Friston had done most of his conceptual thinking on Sundays, alone in his office—a room on Queen Square, furnished in the manner of M's office in a James Bond film (a standing globe, a cocktail table with several champagne flutes on it, a hanging tapestry, a sofa draped with a shawl). He had no connection to the philosophical end of cognitive science. "Until I met Andy," he wrote later, "I did not really understand philosophy. I knew it was a good thing; like the national parks, poetry, village fetes, history—and other nice things that enrich our life. However, I never really understood its (scientific) purpose."

But Friston had begun to realize that he was not very good at explaining himself. He had tried, but nobody understood him. Psychologists and neuroscientists couldn't understand him because they didn't have the mathematics—that couldn't be helped. But mathematics people didn't understand him, either. Reading groups and discussions had been organized in universities from New York to Melbourne with the mission of understanding Friston's free-energy principle, only to disband, inevitably, in failure. The impossibility of understanding Friston had become an online meme. An artificial-intelligence scholar who taught at Northwestern posted an article titled "How to Read Karl Friston (in the original Greek)." Somebody started a Twitter account, "Farl Kriston," that began, in its first few months, by tweeting impenetrable quotes from Friston himself—"In what follows, we assume that the imperative to maximise model evidence is a (possibly tautological) truism"—before degenerating, HAL-style, into desperate gibberish ("I am, whatever I think I am. If I wasn't, why would I think I am?").

Friston's free-energy principle was particularly exciting to Clark, however, because it seemed to link predictive processing to his earlier thinking about embodied cognition (the way that thinking had evolved for and with the body). Friston believed that minimizing prediction error—roughly the same as minimizing free energy—caused the body to act. True, this account of bodily action sounded a bit peculiar. How does the brain cause an arm to move? It *predicts* that the arm is moving. Proprioceptive sensors issue frantic error signals to the muscle telling it that the arm is not moving; the muscle resolves this uncomfortable situation by causing the arm to move, thus rendering the brain's prediction correct.



"That reminds me of the thing I was going to say next regardless."

To Clark, the incorporation of bodily action into predictive processing's mind-world loops made sense. But he was leery of the theory's all-encompassing ambition. Friston was not content to formulate a theory of the human brain; he had applied his principle to animals, even plants. Ever since he was a child, he said, he had felt "an obsessional drive to integration and simplification": he was initially drawn not to neuroscience but to mathematics and physics. Clark, on the other hand, was attached to a view of the world, derived from evolutionary biology, that saw life as a messy, ad-hoc business, patched together bit by bit over the eons, one system on top of another, with lots of redundancy and clutter along the way. Simplicity did not attract him. He was also suspicious of it—it didn't smell to him like the right answer.

The basic problem, Clark thought, was that he was a scruffy, while Friston was a neat. Clark loved variety and profusion and abundance. It wasn't just that he believed that it was *true* that living creatures were patched-together bags of tricks—he also *liked* things that way. Friston's arguments had been pulling him toward simplicity—he was now prepared to entertain the idea that predictive processing was a high-level neat system that orchestrated biological scruffiness below. But he was never going to like elegance the way that Friston did. Clark told Friston that Friston was, in temperament, like the austere philosopher W. V. O. Quine. Friston had never heard of Quine, so Clark explained that Quine had once said, of what he considered to be an unnecessarily complicated idea, that its "overpopulated universe is in many ways unlovely. It offends the aesthetic sense of us who have a taste for desert landscapes."

Friston's account of action—predicting that your arm will move in order to make it move—sounded less peculiar if the term "prediction" were taken less literally. A prediction in the Fris-

tonian sense was not a guess about the future; it was something more like a projection—a concept through which the brain understood the world. This concept could be a hypothesis about what was going on; or it could be an imagined scenario—a fantasy. The brain imagined the arm moving, pictured the arm moving, and, through the force of that fantasy, it caused the arm to actually move. Of course, sometimes reality did not coöperate: sometimes an arm was paralyzed, or caught in the jaws of a bear. In that case, the brain would be forced to deal with the prediction errors by overriding its hopeful prediction and conceding that, in this case, at least, the sensory information was correct, and the arm really wasn't moving.

The idea of a fantasy sounded oddly Freudian in the context of neuroscience, but the connection between the free-energy principle and Freud was one that Friston himself had been pursuing of late, ever since Christoph Mathys, a young neuroscientist from Zurich, had arrived to work in his lab. After Mathys had been there for six months, Friston found out by accident that he was training as a psychoanalyst on the side. Mathys hadn't mentioned this—it wasn't the first thing you brought up among neuroscientists. But it turned out that one reason Mathys had come to the lab in the first place was that he had perceived a deep resemblance between the Freudian model of the mind and Friston's free-energy principle, and had realized that there was a historical link between the two.

Mathys knew that Helmholtz's theory of unconscious inference—originating in his childhood experience of seeing doll-like figures in a belfry—was a precursor of Friston's theory of perception; and he knew that Freud had been influenced by Helmholtz, too. (Soon after arriving in London, Mathys visited Freud's final home, in Hampstead, and was thrilled to spot a copy of Helmholtz's handbook on physiological optics on a shelf right above the famous couch.) Mathys mentioned to Friston the similarity between his free-energy principle and Freud's model, and said that they had a common ancestor in Helmholtz. Friston became very interested. He sought out people who knew more about Freud than he did, and co-wrote several papers elaborating on the connection.

Freud's version of free energy (he used the same term) was similar to his notion of excitation: an uncomfortably stimulating psychic energy, which the nervous system sought to discharge. "Accumulation of excitement," he wrote in "The Interpretation of Dreams," "is perceived as pain and . . . the diminution of the excitement is perceived as pleasure." The urge to discharge the free energy was what drove a person to act—to move around, to seek sex, to work. Friston's version of free energy—prediction error—could sound at first as if it were all about cognition, just as Freud's version could sound at first as if it were all about sex, but at root they were both about survival. Minimizing prediction error, in other words, was much bigger than it sounded. When the brain strove to minimize prediction error, it was not just trying to reduce its uncertainty about what was going on in the world; it was struggling to resolve the contradictions between fantasy and reality—ideally by making reality more like fantasy. The brain had to do two things in order to survive: it had to impel its body to get what it needed, and it had to form an understanding of the world that was realistic enough to guide it in doing so. Free energy was the force that drove both.

Perhaps because Clark has been working so closely with a neuroscientist, he has moved quite far from where he started in cognitive science in the early nineteen-eighties, taking an interest in A.I. "I was very much on the machine-functionalism side back in those days," he says. "I thought that mind and intelligence were quite high-level abstract achievements where having the right low-level structures in place didn't really matter." Each step he took, from symbolic A.I. to connectionism, from connectionism to embodied cognition, and now to predictive processing, took him farther away from the idea of cognition as a disembodied language and toward thinking of it as fundamentally shaped by the particular structure of its animal body, with its arms and its legs and its neuronal brain. He had come far enough that he had now to confront a question: If cognition was a deeply animal business, then how far could artificial intelligence go?

He knew that the roboticist Rodney Brooks had recently begun to question a core assumption of the whole A.I. project: that minds could be built of machines. Brooks speculated that one of the reasons A.I. systems and robots appeared to hit a ceiling at a certain level of complexity was that they were built of the wrong stuff—that maybe the fact that robots were not flesh made more of a difference than he'd realized. Clark couldn't decide what he thought about this. On the one hand, he was no longer a machine functionalist, exactly: he no longer believed that the mind was just a kind of software that could run on hardware of various sorts. On the other hand, he didn't believe, and didn't want to believe, that a mind could be constructed *only* out of soft biological tissue. He was too committed to the idea of the extended mind—to the prospect of brain-machine combinations, to the glorious cyborg future—to give it up.

In a way, though, the structure of the brain itself had some of the qualities that attracted him to the extended-mind view in the first place: it was not one indivisible thing but millions of quasi-independent things, which worked seamlessly together while each had a kind of existence of its own. "There's something very interesting about life," Clark says, "which is that we do seem to be built of system upon system upon system. The smallest systems are the individual cells, which have an awful lot of their own little intelligence, if you like—they take care of themselves, they have their own things to do. Maybe there's a great flexibility in being built out of all these little bits of stuff that have their own capacities to protect and organize themselves. I've become more and more open to the idea that some of the fundamental features of life really *are* important to understanding how our mind is possible. I didn't use to think that. I used to think that you could start about halfway up and get everything you needed." ♦

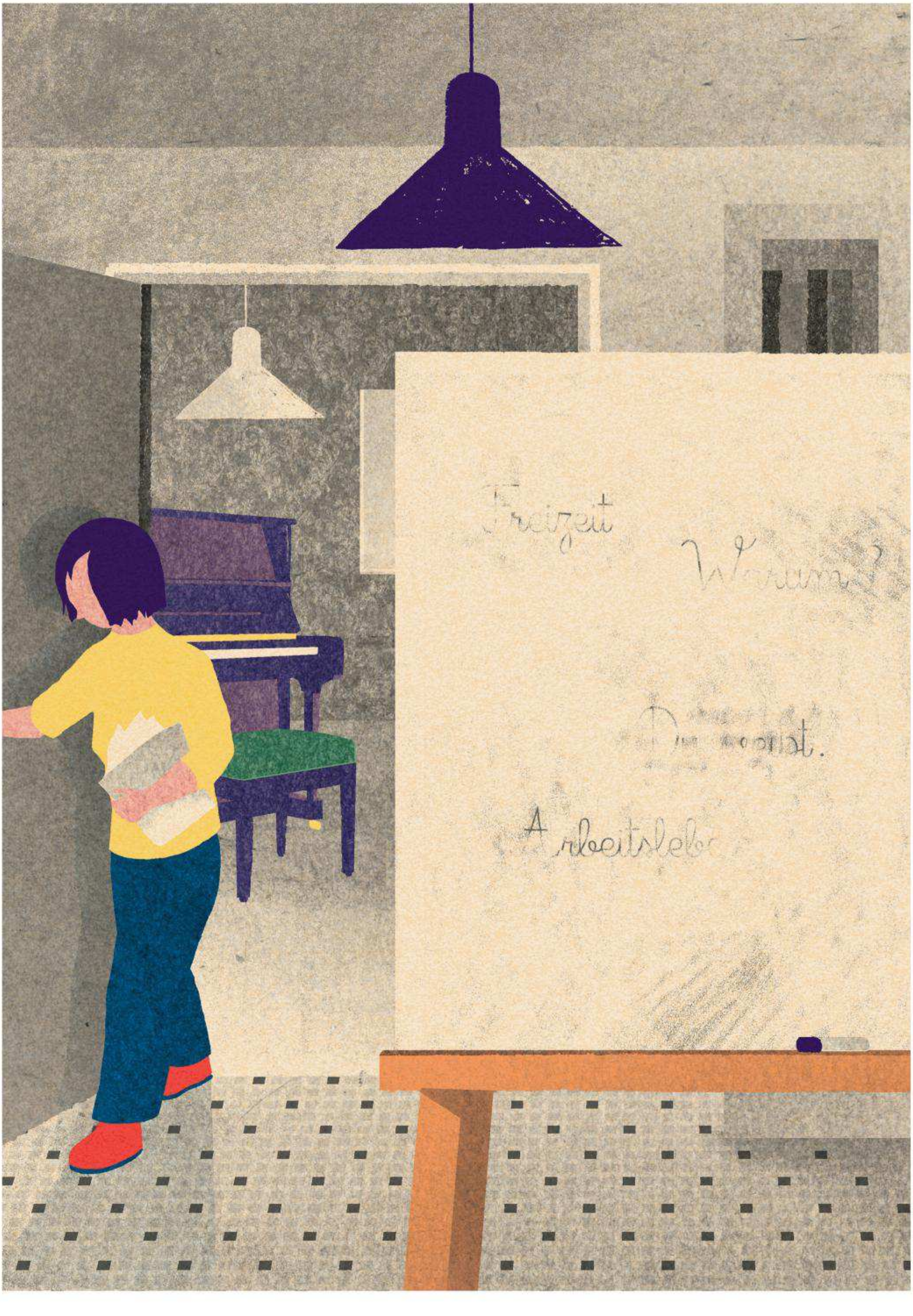


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FICTION

The Intermediate Class

BY SAM ALLINGHAM

When Kiril arrived at Room 2C for the first time that Wednesday evening, he was surprised to hear a piano ringing out from behind the classroom wall. It was early summer, and the community center was almost empty; the children's camp had been dismissed hours earlier, and in the silence the clustered chords seemed dense and significant, like church bells. He was already late, but he paused for a moment, listening. All day he'd debated backing out at the last minute, though the course was prepaid. Even now, his hand on the doorknob, he felt a slight urge to run. But the music was too intriguing. It drew him through the door.

He was disappointed, upon entering, to find that there was no piano: just a whiteboard, a long table, and four students arrayed around it. The class turned to him, and suddenly his disappointment seemed foolish—for what business would he have in a music class?

"Is this Intermediate German?" he asked.

"That's right," a woman with a close-cropped Afro said. "You new?"

"Yes," Kiril replied. "I mean, I took a class before. But not here."

He chose a seat in the middle of the table: near enough to see the board, but far enough not to seem overeager.

A pale, thin woman sat next to the woman with the Afro, her arms covered with angular tattoos. "The teacher's great," she said. "We had him for Beginning."

"Twice," the woman with the Afro added.

On the other side of the table sat a Latino man about Kiril's age, early thirties, with an open smile that was either optimistic or mildly deranged. Next to him, in the corner farthest from the board, sat a white man in his fifties. He was badly sunburned, and seemed to be in a foul mood about it, arms crossed tight above his potbelly.

The class was more diverse than Kiril had expected. "Why would you want to spend time with old housewives?" his mother had asked, when he'd suggested spending three hundred dollars on a German course. "Lazy American housewives" was what she'd meant: the kind with too much time and money on their hands. Kiril would enjoy telling her she'd been mistaken.

She'd never approved of his taking German in college. He was majoring in computer science, a practical course of study, and had no time to waste. Besides, he already had the gift of native English: that sprawling, absurd language she'd spent half her life trying to learn. But Kiril had always loved German, which had a name for everything. One morning, at the beginning of class, the professor had brought in an illustrated dictionary with the parts of animals, plants, and various machines written *auf Deutsch*. He still remembered the picture of a car, deconstructed, every piston and lever lovingly identified. English seemed fuzzy in comparison: a wide blanket, full of holes.

He heard the piano again, pealing through the adjoining wall. The sound was enormous, as though reverberating in a concert hall much larger than any community center could contain. The music stopped abruptly—a major chord, dying away—and a door opened, hidden behind the whiteboard. A man and a woman emerged, holding sheet music to their chests.

"Thank you, Claire," the man said. "What a treat." He wore a khaki work shirt and pants that zipped at the knee. His beard was silver, but he walked on the balls of his feet, bouncing from left to right.

The woman looked a bit older than Kiril, and was extremely short: barely five feet tall. She took the last empty seat at the table and looked down at her hands, as if wondering how these tiny fingers could produce such beautiful music.

The man took his place at the whiteboard. "I see we have a few new faces," he said. "So let me explain the rules." He pointed to a bell in the middle of the table. "When I ring this bell, we will no longer speak English. If anyone speaks English, I will act as if I don't understand. This forces us to take risks with our German—to experiment together."

The three women shared a knowing look. Clearly they had great faith in the teacher. The sunburned man, however, seemed terrified, while the man with the airy smile went on smiling, heedless of danger. Kiril decided to follow his lead, though his own smile was forced. He had never been very good at appearing relaxed.

The teacher rang the bell. Immediately the atmosphere changed. The students rose to attention, serious faces trained on the board.

"We will introduce ourselves," the teacher said, in German. "We will talk a little about the things we do in our free time. We know this word, yes? 'Free time'?"

He wrote the word on the board: *Freizeit*. He was calmer in German, less buoyant. He spoke slowly, with a certain sombre attention, like a kindergarten teacher explaining the tragic facts of life.

He pointed at Kiril. "You first, perhaps?"

Kiril cocked his head to the right and looked up at the ceiling: a nervous habit his mother referred to as calling on God. She felt he did it more often than was necessary.

"I have name of Kiril," he said, too quickly. "Kiril is me."

The class smiled, happy to forgive his mistakes—all except the sunburned man in the corner, who had the sour expres-

sion of someone lost and unwilling to ask for directions.

"I am Kiril," he said, more slowly this time.

Everyone said hello.

"Now, Kiril," the teacher said. "Tell us what you like to do in your free time."

Several images flashed in his mind's eye: his mother, bent over a sewing machine; a scene from a film in which a monster rose from a tunnel and dangled a frightened man in his claws; Spruce Hill Park after a thunderstorm, dappled rain on light-green leaves.

"I am running," he said. "I am running sometimes, but not far. I am running in the park."

"What kind of park?" the teacher asked.

He thought of the muddy bowl where the dogs played, the sound of laughter, and the scent of marijuana, wafting from beneath the trees. He never smoked marijuana, but he loved the smell: herbal and rich in his overactive lungs.

"I like very much the park," he said. "It is dark and cool, and in the park there are dogs and people and flowers and trees."

The girl who played the piano murmured wordlessly. Perhaps she had similar feelings.

Kiril began to relax. "And . . . the park . . . is not . . ." Finally the correct word came to him. "Crowded."

"It sounds like a beautiful park," the teacher said. "Now we will continue."

It was the sunburned man's turn. "I is Arthur," he said. The effort made his face grow even redder. He offered no further information.

The teacher pointed to the thin girl with the tattoos.

"I am Morgan," the girl said, with only slight hesitation. "In my free time I play the guitar."

"Very good," the teacher said, turning to the class. "Now we will ask Morgan some questions."

"What kind of music do you play?" the woman with the Afro asked. Her German was stiff and precise: nothing like the casual warmth of her English.

"I play the slow, sad music," Morgan said.

"Why do you play slow and sad music?" the Latino man asked, from across the table. He had been quiet so far, the smile never leaving his face. His grammar was excellent, but his pronunciation was off, and the pale woman had trouble understanding his question. Or maybe, Kiril thought, the question was simply too complicated.

The teacher jumped into the fray. "'Why' is a difficult word," he said. "'What,' yes. 'Who,' yes, and 'Where.' These are better, maybe, in the beginning."

The Latino man shrugged. He seemed to disagree about the relative merits of "why."

"We will continue with you," the teacher said, pointing in the Latino man's direction.

"I am called Alejandro," he said, squaring his shoulders. "It is a pleasure to meet you."

Kiril felt envious of Alejandro's easy dignity, as if he had a lifetime's experience talking to strangers.

"Yes, this is good," the teacher said. "This is very polite. And in your free time?"

"I watch the trains," the man said. "On a nice day, I drive to watch the big trains go to the city. Sometimes on Sundays I am the train driver for the small train. I wear the hat, I drive the people. There is nature on the left. There are trees and flowers, and once there was a fox. It is for to look at nature, the train. I drive it myself or with one person. But myself is very good. I drive the train for three hours, three hours long, and it is very good to me."

After he'd finished, there was a long silence.

"Now we will ask Alejandro questions," the teacher said.

"Where does the train go?" the woman with the Afro asked.

Alejandro smiled again, this time shyly, as if remembering a secret pleasure.

"It goes round and round," he said.

The class clapped politely.

The woman with the Afro was called Wanda. The following week, at the teacher's request, she presented an essay on the subject of "My Family." The essay was meant to demonstrate the past tense. Wanda stood before the class with a piece of paper and read it aloud, her voice firm and slightly clinical.

"My son is a polite child," she began. "When he was young, to the church he went. Our family goes to the church every Sunday. When my son became older, to the church he did not go. He says he is busy, but the church is not long, and the spirit is forever. In his free time my son reads books, and is not trouble. But there is trouble in his spirit, and I worry. However, this week a good thing happened. This Sunday he comes with me to the church again. Many churchmen cried. My son feels him good in the spirit, so I am happy. And I hope it will last a long time."

The class clapped enthusiastically.

"Let us write some words," the teacher said. "We will write 'church,' and 'parishioner,' and then—very complicated—'spirit' and 'soul' and even 'brain'! Yes, words can be complicated."

The teacher stepped back from the board and gazed for a moment, transfixed.

"Now, class," he said, returning to himself. "Let us thank Wanda for her essay."

The class thanked Wanda.

"Now we will talk about our work life," the teacher said, writing the word on the board: *Arbeitsleben*.

They had been warned about this subject in advance, and Kiril had prepared a few vocabulary words the night before at the kitchen table, while his mother caught up on alterations: network, *Netzwerk;* user interface, *Benutzeroberfläche*.

"We will start with Alejandro," the teacher said. "Alejandro, what is interesting about your 'work life'?"

"Thank you for asking," Alejandro said.

"You are welcome," the teacher said. "Yes, this is very polite."

"I am a driver," Alejandro said. "I am always driving."

"Ah, Alejandro," the teacher said, pointing at the board. "This conversation is about our work life, not our free time."

"It is my work life," Alejandro insisted. "I am the driver."

"You are always the driver?" the teacher asked. He rubbed his eyes.

"For my work life also I am driving," Alejandro continued. "In my free time I am driving the train, but in my work life I am driving the truck."

The teacher gave a nervous giggle. Alejandro's smiling insistence seemed to unnerve him. "Why do you enjoy driving so much, Alejandro?"



"Do you want me to seat you in the 'Had sex this morning' section or the 'Had a fight this morning' section?"

For the first time, irritation flashed in Alejandro's calm gaze. "You said 'why' is too difficult," he said. "Is it too difficult or not?"

The teacher paused, taken aback. "Yes. Perhaps 'where' is better. Where do you drive the truck?"

Now Alejandro appeared sad. "I go round and round," he said.

Kiril was impressed by the range of Alejandro's emotions. He himself sometimes felt trapped in a single mood: a kind of pressurized worry, marbled with sadness, through which flecks of pleasure were visible during certain parts of the day—mostly in the evening, when the sun set over the gabled Victorians near the park, edging them with fire.

"Perhaps it is time for a break," the teacher said.

He rang the bell, and he and Claire disappeared through the hidden door. Music rippled from behind the wall. Kiril was aware of the air in the room, the currents within it like water. He looked at Arthur, but Arthur pretended not to see him, glaring into space. He looked at Alejandro, and the man's smile deepened, becoming more complex. Kiril wondered if he had seen Alejandro in the neighborhood before, while he was doing errands for his mother, or visiting one of his cousins who lived in the warren-like streets south of the park. If he saw him again, he would raise his hand in friendship.

The door behind the whiteboard opened, and Claire and the teacher emerged.

"Wonderful, just wonderful." The teacher turned to the class. "That was Schubert's 'Fantasy for Four Hands.'"

The students nodded, but only automatically. The title of the piece meant nothing to them.

"Now we will have pair conversation." The teacher cracked his knuckles.

Kiril was afraid he would be forced into a pair with Arthur, who continued scowling at his phone long after class had resumed. It was a great relief to be placed with Alejandro instead.

The teacher wrote the subject on the board: "My Home Life." As the students talked, he sat by the window and looked out at the damp green night with an expression of melancholic attraction. He looked like the captain from a movie Kiril had once seen on cable: the captain of an ancient vessel, fated to sink.

"I live with my mother," Kiril told Alejandro. "It is pleasant, but the house is small. Too small, sometimes. I have to go out."

"To the park," Alejandro said. "You run in the park."

Kiril was happy he remembered; it made him more comfortable. He didn't consider it shameful, living with his mother. Many of his cousins were in the same situation, and even those who were married or lived alone saw nothing odd about it. It was a matter of respect, of being a dutiful son. Still, it wasn't something he would ordinarily share with a stranger.

"Yes," he said. "I am in the park running. And it is cool and not crowded, and there are flowers and trees."

Alejandro smiled and closed his eyes, the vision blooming in his mind. The park was only a few blocks from the community center. Perhaps they had passed each other at some point during their wanderings: under the tall sycamores, through the loose blue stones.

"Why do you run?" Alejandro asked, softly, as if aware that he was breaking the rules.

"I do not know," Kiril said. "Let me think."

He was not used to expressing these sorts of feelings. As a child, he might have talked to his mother about them, or even to God, but now that he was an adult, alone in bed at night, the silence lay heavy on his stomach and his lungs.

"I am running because there is a pain in my head," he said. "My eyes hurt with work and there is a head pain. Then I am running and there is no head pain. Especially in fall, the best season, the season that is the best. The cool season, with many birds."

"I see," Alejandro said. "It is clear. I like fall also."

Here they had exhausted the appropriate words.

"Where do you live?" Kiril asked. He had to force himself to use the casual

du. Sometimes, when he searched for German, Russian came to him instead, and he reverted to the patterns of childhood. "Always be respectful to strangers," his mother told him. "You're not the sort of person who can afford to be impolite."

Alejandro sighed. "I am living with men who are not so good," he said. "Fight-men."

"That is a little bad," Kiril said, though he didn't fully understand.

"Let us come back to the table," the teacher said. "We will read a poem about a miller, a brook, and a waterwheel. It is an old poem, but it has words that will be helpful for you to know."



The class read the poem out loud, one student at a time. Kiril remembered it from somewhere: some distant fluorescent classroom, shaded with humiliation. When it was Alejandro's turn, he read carefully and fluently, as if he understood the poem's meaning, though it was from the eighteenth century: a time of simple emotions, travelling handymen, and light flickering on water. Perhaps in another time Alejandro would have been this miller, Kiril thought. He would have wandered the woods, ever hopeful, eyes dazzled by sudden flashes of sunlight.

The following week, they discussed where they liked to go on vacation: the shore, the mountains, abroad. When the discussion was over, it was Claire's turn to read an essay in front of the class.

"My essay is titled 'An Interesting Week,'" she said, and began to read.

Kiril had come to enjoy the calm commitment of her voice, the way the others leaned in to hear it. She wore large glasses—perhaps, Kiril thought, to magnify her tiny eyes.

"I wanted to have an exciting week," she said, "in order to write an essay the class would find interesting. But on Friday my boyfriend was sick, and I was only able to do such interesting things as travelling to the pharmacy and taking his temperature. Then on Saturday I became sick, and did such interesting things as coughing, shaking, and dreaming in a fever. On Sunday we both felt better, and so we did such interesting things as reading, drinking tea, and sweeping the dusty house. I was worried. I asked my boyfriend if my life was a little boring. My boyfriend is a serious person. He thought for a long time. He told me that everybody's life is a little boring, if you write it down."

The essay seemed to confuse the students. They searched the teacher's eyes for an explanation. Kiril, however, found it clear and precise. It seemed to express fundamental truths about existence.

The teacher clapped. "It is a complicated essay!" he said. "It is a little *komisch*. Let us write some of the words. We say 'cough,' 'coughed,' 'has coughed.' We say 'dream,' 'dreamt,' 'has dreamt.' We say 'shake,' 'shook,' 'has shaken.'"

He wrote on the board in wide, looping arcs, then stopped to examine his handiwork. He frowned, as if troubled by the images such words implied.

"Did you not play piano this week, Claire?" he asked. "That would be interesting."

"No," Claire said, with a resigned expression.

"No?" the teacher asked. "You did not play? Or playing the piano is not interesting?"

"I do not have piano."

The teacher seemed lost. "You do not have a piano?"

"A piano is very expensive, and my house is small."

"Ah, but you should have a piano," the teacher said. "You play so well. Your boyfriend can buy you a piano."

"My boyfriend?" Claire stifled a laugh.

The teacher seemed momentarily shaken, though Kiril couldn't understand why. Perhaps he was afraid of losing control of the conversation.

"Yes, as a gift," he insisted. "Because you play so well."

Perhaps the teacher meant it as a joke, but something about the intensity of his voice suggested otherwise. The discussion was becoming too personal; the students shifted in their seats.

Claire did not laugh. "My boyfriend will not buy me a piano," she said, evenly, refusing to echo the teacher's emotions.

The teacher nodded sadly, as if this news confirmed sad truths about life that he generally chose to forget. Kiril wondered if the teacher's duets with Claire were the sweetest part of his week: something to look forward to, on otherwise unremarkable evenings. Maybe in solitary moments he imagined her small hands dancing across the keys.

"The piano is a very expensive instrument," the teacher said, finally. On the board he wrote, *Ein Klavier ist ein sehr teures Instrument*.

The class wrote the sentence down dutifully, with the exception of Claire, who already knew all about it.

"And where is Alejandro?" the teacher asked. "The man who is always driving."

"Alejandro is not here," Kiril said.

He had noticed Alejandro's absence as soon as class began, and as the minutes ticked by his disappointment had grown ever larger, until he had a hard time focussing on the discussion. Wanda and Morgan were already paired, Claire and the teacher were always disappearing behind the wall, and Arthur repelled all human contact. Kiril had hoped that, of all of them, Alejandro might become his friend.

"Alejandro is a good student," Wanda said, clearly and with perfect pronunciation. "His German is very good, despite his accent."

Kiril wondered if she had practiced lines like these at home, about each of them: *Arthur learns very slowly. Kiril speaks too quickly, he is nervous.* It seemed unfair to talk like this, behind someone's back.

"But having an accent all of us!" he said, his voice a shade too loud. "It is natural, and he speaks well and he asks good questions. He is a very good student, the best!"

Now the students looked afraid, as if he had threatened them. Kiril was filled with remorse.

"I am sorry," he said. "I am making many mistakes."

"It is my fault," the teacher said. "Let us not speak of Alejandro. Probably he

is sick. He is taking a sick day. There is a word for this."

He wrote it on the board: *Krankentag*.

"Yes, that is good," he said, stepping back. "If you use this word, you will sound like a native speaker."

The class wrote the word down.

After that day, Claire and the teacher no longer played the piano together. During the next class, while Morgan read a halting essay about her political activism—"I am walking against the government; I am walking with many others to the large building of the government, holding hands"—Kiril watched Claire out of the corner of his eye. Whenever Morgan spoke an unfamiliar word, Claire wrote it down in her notebook. Later, during the break, newly bereft of music, she checked these words against an online dictionary, clarifying their gender and their endings and making small corrections. The teacher played in the other room, alone, the pieces softer, more restrained.

Alejandro did not come to the next class, or the one after that. Kiril waited for him to appear, the way in high school he had waited for far-fetched things to break up the tedium: sudden snowstorms, a citywide blackout, subtle variations on the end of the world. In the meantime, he paired up with other students: with Wanda for "My Childhood," with Morgan for "My Student Life."

He was glad that he was not paired with Claire. He found her quiet precision intimidating, and preferred to watch her from the other side of the room.

It was the middle of July now: their second-to-last class. Kiril was disappointed that the course would soon be over. Not because it had been particularly helpful—his German was improving only slowly—but because he felt as if an opportunity had been lost. Sometimes, as they stumbled through conversations about their parents and their pets, he felt like a person in a dream who hears a party happening in a nearby house. His legs are frozen; if only he could float through the window, like a piece of colored paper, and slip at last into the living world.



"I'm going to ask you a series of scary questions. When I'm done, let's see if you can guess why I'm asking them."

"Now we will do a short exercise," the teacher said. "We will say a few sentences about what led us to learn German."

Wanda consulted her notes. "There is a man at my church who studies the piano," she said. "He plays and sings a different kind of music. I didn't know the words. It was in a different language. It was German, he said. It was so, so beautiful music."

"Very good, Wanda," the teacher said.

"They said it was too expensive," Wanda went on, disregarding her notes. "But the money is mine, and I will spend it. Some people do not understand. Because of small minds."

Suddenly, Claire began to speak: haltingly, at first, as if Wanda's story had woken her from a nap. It seemed to Kiril that she had become more tentative as the class went on—not because her German was deteriorating but because the emotions she wanted to describe were becoming more complex.

"I am like Wanda," she said. "But I was the one who played the piano. I knew the words, but I wanted to know them better. I thought . . . that if I knew them better . . . I would feel differently. And then . . . I did. And it was different . . . than I thought it would be. And then time went by, a long time, and then I didn't play the piano."

While Claire talked, the teacher stared at the ceiling. When she was finished, he rubbed his eyes.

"We will turn to the essay," he said. "Arthur is worried about his grammar, so we will help him. He will read a sentence, and we will correct him. Then I will write the sentence on the board."

Arthur got slowly to his feet. "The title of my essay is 'My Wife,'" he said.

Arthur hardly ever spoke, and yet his German had improved the most, Kiril thought. Not that he realized it—he was fixated on his mistakes.

"My wife is German," Arthur began. "My wife in the Army is meeting."

"I met my wife in the Army," Wanda said. "It is correct."

"I was in Germany," Arthur continued. "She is the East."

"She lives in the East," Kiril corrected.

"She is from the East," Morgan said. "She is from East Germany."

The teacher wrote the corrections on the board, bouncing from foot to foot. Only when his hands were moving did he seem truly happy.

"In the East they speak German," Arthur said. "In the East they do not speak English. But we have this language."

Here Arthur mumbled, as if refining the words like rough rocks in his mouth.

"Secret," he managed, after a while. "Secret."

"Is it a *secret language*?" Claire asked.

Kiril found himself staring at Claire. He tried to turn away, for the sake of politeness and to follow the exercise, but his eyes were drawn back each time she spoke, to her odd, self-satisfied smile. She seemed to be aware of some joke the rest of them couldn't grasp.

"Yes, thank you," Arthur said. "We have a *secret language*. In the old."

"A long time ago," Claire said. The phrase stirred her. She smiled thinly.

Arthur sighed. "We have a *secret* a long time ago."

"And now?" Wanda asked.

"And now?" Arthur echoed. The essay slipped from his hands and fell to the floor, and he cursed.

"Perhaps it would be better to move on," the teacher suggested.

Arthur did not pick up the paper. "I want to speak to my wife, but not in German," he said, voice trembling.

"I want to speak to my wife in German," Wanda corrected.

"No!" Arthur's voice was suddenly gruff, almost barking. "I want to speak to my wife not in German."

Claire murmured, "You want the *secret language*."

"Yes," Arthur said. "This is better. But it is so, so speaking difficult."

Claire nodded. "It is perhaps impossible."

"Yes," Arthur replied. "It is far away and difficult."

"It is not so difficult," Wanda said, strictly, as if chastising a lazy child.

"It is not so difficult," Kiril agreed—though of course it was the most difficult thing in the world.

"No," the teacher cried, in sudden anguish. "It is not impossible! Two people who speak a language well will come one day to the 'secret language.' It is not so different from what we do. It is there every day, all the time, when you speak! I promise, it is not so far away!"

He stopped and leaned against the desk. Kiril wished the teacher could be calmer, less concerned with the emotions of others. But he supposed that was the way teachers always were. Their satisfaction hinged on the lives of strangers.

"Are you healthy?" Arthur asked the teacher.

The teacher stared at him blankly.

"Are you all right?" Claire asked.

"Yes," the teacher said. Blinking, he stood up straight again, and forced a laugh. "I am only a little tired."

He wrote it on the board—*Ich bin nur ein bisschen müde*—but the class was too shocked to copy it down.

"Next week is our last class," the teacher informed them. "We will all bring something to eat. Please write a food you will bring on the list. It is nice if it is homemade, but it is not necessary. People are busy."

He passed the list. "Please write down one dish you think everyone will like," it read, in English. Kiril wrote down "pierogies," as he always did when someone asked him to represent his culture. The women at his mother's church sold them, in order to save the Orthodox orphans in distant countries.

When the class left the community center, the air was wet and heavy. It had rained, or else it was going to rain—Kiril wasn't sure which. With little ringing sounds of friendship, the students scattered like drops of water. Wanda and Morgan walked west, while Arthur fell into a car with a rusted roof and roared away. That left Claire and Kiril alone at the trolley stop, which was confusing. Claire had never waited at the trolley stop before.

"Change of plans?" he asked.

"I've moved," Claire replied.

This brought up a host of questions. Had she and her boyfriend moved together, or had she left him, striking out on her own? Why had she decided to move at the height of summer, when the air could be so hot and heavy you hardly knew how to breathe? Was she happy in her new place? Would she become happy there, given time?

Kiril didn't feel that he had the right to ask any of these questions, now that class was over. Instead, they talked about the teacher's sudden outburst.

"He tries so hard," Claire said. "But he's a bit ridiculous, isn't he? I can't imagine the pay is good."

Kiril couldn't disagree, and yet he felt the urge to defend the teacher. The world they had built together seemed a fragile, tenuous thing; one stray word and it might collapse entirely—and in a week it would be over, no matter how well they behaved.

The trolley was coming down the hill. Kiril wanted to tell Claire something before it arrived. He wanted to explain that he was nothing like the teacher, that he was not a ridiculous person, though he might seem so, in that awkward little room. He had a mother he loved, even if she was old-fashioned and stiff; he had cousins whom he saw every weekend; friends from school with whom he went to movies and bars; women he dated from time to time, without forming long-term attachments; a job that paid well, where he was respected, even essential. He had a full life, a full world.

But why would she care? To her, he didn't exist beyond the boundaries of the classroom; and the same was true of her, for him, for everyone. Still, he wanted to tell her: not about loneliness, exactly, but about a strange feeling that sometimes came over him, now that he was taking the German class. He would be riding the subway, or walking in the park, and the faces that appeared before him seemed less like strangers locked in silence than like people who might offer him their secrets, if given a small room, a whiteboard, a friendly teacher. On the trolley ride home, the windows were full of other people's lives.

The trolley stopped, folding its accordion doors. They climbed on board.

"You must be tired," Kiril told her. "I'll leave you to your book."

He could feel the formality of his English. He wished he had the courage to speak to her only in German, here in public, no matter who might overhear.

She smiled. Perhaps she knew what



"That can't be good."

• •

he was thinking, for she replied in German. "*Yes*," she said. "*My voice is tired*."

"*Ja, natürlich*." He smiled at the words, flowing so easily from his mouth. "*Tschüss*."

"*Tschüss*," she replied, and took her seat.

He sat a few rows behind her and looked out the window, toward the Victorian homes that faced the park and, above them, the purple crown of the sky. He knew that she was looking, too, lines of German echoing in her head, until the last echoes faded, replaced by the music of daily life: overheard complaints; lyrics from the summer's hip-hop hits; the sound of the conductor, naming the streets he travelled every day, round and round.

It was easy to drift back into it, like a dream that lasted for years. When Kiril looked up again, Claire was gone.

On their last night together, twenty minutes after the class had started—after they had drunk a little of the dark beer the teacher had brought, after they had agreed to talk one last time in German only—Alejandro appeared in the doorway. His shirt was torn, and Kiril thought he could see the yellow outline of a bruise at the edge of his right eye socket.

The teacher tried to mask his surprise. "Alejandro, hello," he said. "It is good to see you."

"It is very nice to see you as well," Alejandro said. "I would like to apologize for my long absence."

"It is no problem," the teacher replied. "We are glad you are back. This is our final class party. We are talking about our language goals and practicing our future tense. We are appreciating how much we learned together."

"Yes, we learned a lot," Alejandro said.

"Happy we are to have Alejandro back," Kiril said, though what he really felt was a sense of foreboding. It was as if they were moving backward in time, becoming more innocent and less skilled.

"We are all very happy," Wanda said.

The teacher got up and poured Alejandro a glass of beer.

"Thank you very much," Alejandro said, taking a sip. "The beer is pleasing to me."

"Now, Alejandro," the teacher said. "We will talk about our language goals. For example: Claire, what is your goal?"

"I will read poetry," Claire said, "and write my *komischen* stories."

They gave their goals to Alejandro, one by one. Kiril would listen to German songs as he ran in the park. Arthur would ask his wife about her day. Wanda would learn the lyrics to the old songs the man in her church had played for her.

"You see how it is done, Alejandro," the teacher said.

"It is complicated," Alejandro said.

"This is the last class," the teacher said. "Try, please."

"I am having a hard time with friends," Alejandro began. He spoke more slowly than Kiril remembered, more stiffly. Perhaps his jaw was injured. "I am trying to talk to people in many languages. But people do not talk. I am thinking they are strict; they are too strict, and then they become angry. I am thinking I will take a class and we will talk to each other in the class and it will be easier. I am thinking we will say what we must say, and we will be friends. But we do not make friends, because language is strict and we do not understand difficult things. When you do not understand, you get angry. It is natural. How can you understand when things are strict? You cannot understand!"

"You can understand," Wanda said. "Although it is strict, you a little understand."

"You understand only small things!" Alejandro said. His hands were balled into fists, and the fists were trembling. "There is no point, the weather, there is no point, the weekend! My goal is real talking! My goal is friends! But it is so hard to talk in the work life, the home life. And where are the friends?"

"There are friends," Kiril insisted. Something had gone wrong, though he didn't know where, exactly. They were all so willing; you'd think they would have learned something.

Claire laughed quietly. "This is a little *komisch*."

"Please, stop," the teacher said, raising his hands. "Please, let us have a little pause."

He rang the bell.

"I'm sorry," he said to them, in English. "But there are limitations. We don't have much time, and then there are the varying language levels. Oh, you're right, Alejandro, it's too stiff, it's too strict, too expensive—and it's not enough. But we have to do *something*, don't we? Isn't something better than nothing?"

"Jesus Christ," Arthur said. "This class is three hundred dollars."

"Yes, the money," the teacher said. "And I only get half. But no—let's not. That's the shallow way."

"Easy for you to say," Arthur said.

"I am sorry," Alejandro said. "I was inappropriate before. I spoke too quickly. I understand you better now."

"Do you?" the teacher asked. "*I* don't even understand me."

The class stared blankly. Kiril would have liked to speak up, to let the teacher know he agreed with him, and that he forgave him everything—and yet it wasn't the sort of thing he would say, in any language.

"Please," the teacher said. "Please come with me. I wanted to give you all a treat, on the last day. I wanted to do something special."

He led them behind the whiteboard and through the hidden door. On the other side of the wall was a small auditorium, with a grand piano set up on a stage. There were no seats, only a host of unused air-conditioners lying in rows, covered with plastic cases. Kiril realized, suddenly, what a cool, lush summer it had been so far. One never noticed the soothing parts of life. They passed like afternoon hours, like breath.

The teacher went to the piano and lifted the keyboard cover. "You need something underneath the language," he said. "Something to hold on to." Now he switched to German. "*I am playing the piano*," he said, pressing the keys. "*I am playing some Schubert: 'Der Erlkönig.' You can hear it? Here is the horse, in the left hand. You can hear it, yes? You understand?*"

Claire closed her eyes. "*I can hear it.*"

"What is this horseshit?" Arthur asked.

"*This is his music*," Alejandro replied.

The teacher played faster. "*And now the wind is rising. And now we are hearing the boy, who is frightened. You know he is frightened because he sounds frightened. And here is the father. You can hear he is strong, in his voice. You would know it, even if you did not understand.*"

"*I understand*," Claire said. "*It is clear*."

Kiril doubted that anyone could hear her, other than him. She was very close, on his right, though she barely came to his shoulder. She seemed to belong in this other room, with the piano. He could hardly believe they had once talked on the trolley, shuttling down the tracks like a clumsy, mechanical beetle. He was ashamed of how proud he had been, to speak to her.

"And now the demon arrives, the Demon King," the teacher said, switching to English. "And he wants to take the little boy to the land of the dead. You can hear it: his voice is seductive."

"I'm leaving," Arthur yelled. "I wasted my damn money."

"Go ahead and leave, then," Wanda hissed.

Arthur crossed his arms tighter, helpless in his anger.

The teacher played faster now, switching back to German. "*The boy is afraid, but the father cannot hear what the Demon King is saying. And now the melody is too bright, like when someone talks without listening. That is how the man talks. And then the boy says that the Demon King is hurting him, causing him pain. Listen: here is how it sounds.*"

He played for a minute without speaking: high, bitter chords, like someone breaking ice with a hammer.

"*That is the wind again,*" Claire said. "*I can hear it.*"

Kiril felt a pleasurable pain move up his spine. He thought of cool wind in the branches in *Herbst:* the season with the correct name, but only in English.

Now the song was over, the ice-chords fading to silence.

"*I do not need to tell you what happens*," the teacher said. "*You know.*"

"The boy dies," Wanda said.

"*Natürlich*," Claire said, the last, clustered consonant a whisper.

"*But it is so, so beautiful*," Kiril said.

The teacher nodded. He closed the cover. From outside came the sound of sudden rain. ♦

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Sam Allingham on the complications of learning a language.

THE CRITICS

BOOKS

Whiskey and Ink

The stories that writers tell us—and themselves—about drinking.

BY GARY GREENBERG

Jack London started drinking at age five, plunging his face into a bucket of beer he was carrying to his father and lapping it up; he spent the afternoon lying sick under a tree. As a teen-ager, he drank prodigiously, got into fights, and suffered epic hangovers. At least once, he combined all three activities, downing whiskey "like so much medicine" somewhere south of Oakland ("I think the place was Haywards. It may have been San Leandro or Niles"), brawling on the train back to the city, and ending up . . . well, it's not entirely clear, but he came to, the next night, in a strange boarding house, after seventeen hours in a "comatose condition."

By the time London wrote down these recollections, in "John Barleycorn," published in 1913, he was both a famous writer and an every-day drinker, although he generally held off from booze until he'd met his thousand-word daily quota. But he was not, he tells us again and again, an alcoholic. "I was never a drunkard, and I have not reformed," he writes in the last chapter. Because he lacked any "organic, chemical predisposition to alcohol," he was always able to "drink when I wanted, refrain when I wanted," and remained "thoroughly the master of John Barleycorn." With one fateful exception: a period, shortly after he returned from a failed attempt to sail around the world, when he found himself "in the heart and deeps of me, desirous of alcohol." After twenty-five years of drinking, "I had the craving at last, and it was mastering me." The loss of control was only temporary, he claims, but it so unnerved him that he became a suffragist—not out of a concern for equal rights, but because he figured women would sway the country to Prohibition, which he favored on the ground that if a man with his "gorgeous constitution" could be rendered a slave to John Barleycorn, merely by repeated exposure, then no one was safe.

Reading "John Barleycorn" a century after it was published, one is tempted to conclude that London was a terrible sot, and to wonder how he couldn't recognize his own bluster as further evidence of the problem he swore he didn't have. But, then, it was a few decades before "denial" entered the lexicon as a sign of alcoholism—and in other ways London was remarkably prescient. In suggesting that alcoholism was a chemical condition marked by irresistible craving, he anticipated the transformation of our understanding of addiction from a defect of character into a disease, and recognized the reason that it would remain, at best, an uneasy hybrid of the moral and the medical. Chemistry may indeed lie behind alcoholism, but its hallmark symptom is not liver failure or hypertension or any other physical debility. It is, as London recognized, a moral problem: the inability to control desire, and thus to direct the course of one's own life. One might even say that the pathology is political: the surrender of the will to a form of tyranny.

Such servitude is the root meaning of the word "addiction." In ancient Rome, an *addictus* was someone made over to another, as a debt slave to a creditor. The word's connotations have not always been purely negative—as late as the seventeenth century, according to the Oxford English Dictionary, "true bishops" were being implored to "addict themselves to a particular flocke." But in the next century people grew suspicious of turning themselves over to others; Thomas Jefferson, in a letter to a friend, from 1789, explained his refusal to join the Federalist Party thus: "Such an addiction is the last degradation of a free and moral agent." He told his correspondent that he had in mind not only the Federalists but "any party of men whatever in religion, in philosophy, in politics, or in any thing else where I was capable of thinking for myself."

Thirty years or so after Jefferson wrote his letter, Thomas De Quincey connected this idea about addiction to his experience with drugs. In "Confessions of an English Opium-Eater," he argued that what made his dependency monstrous was not the visions it induced—which were sublime as well as terrifying—but, rather, what he would later call "the tyranny of opium." Pick up any of the thousands of recovery memoirs that have been written since De Quincey kicked off the genre and you are likely to find at its heart this notion of addiction: that it is an evil because it robs us of self-determination. Whatever its other depredations, addiction afflicts modern people in a way specific to our time. It renders us unable to dive into our deeps, discover what we want, and fashion out of that desire a unique life story in which we achieve it.

"Yearning is our most powerful narrative engine, and addiction is one of its dialects," Leslie Jamison writes in "The Recovering: Intoxication and Its Aftermath" (Little, Brown). It's a

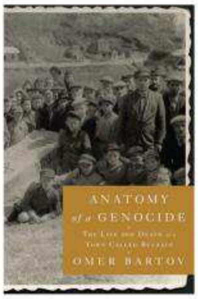
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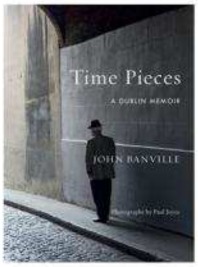
A story about addiction "is always a story that has already been told," Leslie Jamison writes in "The Recovering."

ILLUSTRATION BY MATT DORFMAN

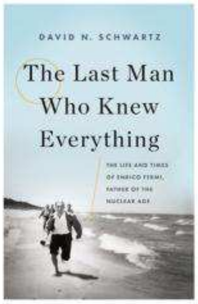
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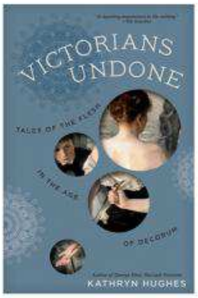
Anatomy of a Genocide, *by Omer Bartov (Simon & Schuster).* Between 1941 and 1944, Polish and Ukrainian inhabitants of the small town of Buczacz helped German occupying forces kill more than ten thousand Jews. The communities had lived side by side for centuries, but Bartov, a noted Holocaust historian whose mother grew up in the town, shows that this shared history, which involved competing narratives of victimhood, often provoked neighbors to turn on one another without remorse. His remarkable archival work produces an account that is finely detailed. Some people provided shelter to strangers; some of the Jewish élite saved their own kin by betraying other Jews. Haunting photographs punctuate the text: a row of exhumed bodies, German officers playing cards and drinking schnapps, survivors erecting a memorial.



Time Pieces, *by John Banville (Knopf).* This "quasi-memoir" takes the form of an amble through Dublin, celebrating the city's parks, canals, pubs, and stately Georgian architecture. Banville, who has largely ignored Dublin in his literary fiction, is attuned to the city's cultural history, and lived for a time in the same building as Yeats's daughter, the painter Anne Butler Yeats. His writing is most evocative at personal moments, such as when he tells of a childhood crush who lived upstairs from his aunt: "I used to dally longingly in the dingy hallway, with its smell of stewed tea and the stink of 'slops,' hoping for a glimpse of the inviolable beloved as she came thundering down the stairs in her big school shoes."



The Last Man Who Knew Everything, *by David N. Schwartz (Basic).* In 1942, the Italian physicist Enrico Fermi conducted the world's first nuclear chain reaction. In this biography, Schwartz laments the dwindling public profile of the man whose work "set the agenda for postwar physics for decades to come." Born in Rome in 1901, Fermi was a "celebrity of the fascist regime" who nonetheless married a Jewish woman. In 1938, after receiving a Nobel Prize, he fled, ending up in the United States. Schwartz marvels that Fermi, working when it was still possible to "master all of physics," did so "across all subdisciplines of the field—astrophysics, nuclear physics, particle physics, condensed matter physics, even geophysics."



Victorians Undone, *by Kathryn Hughes (Johns Hopkins).* In provocative studies of five Victorians—some eminent, some merely notorious—Hughes addresses a "hole in the biographical text where arms, legs, breasts and bellies should have been." While others might skirt genteelly over Charles Darwin's scaly skin, George Eliot's thick right hand, and the dismembered parts of Fanny Adams (an eight-year-old murdered in 1867), Hughes dives in. We meet Queen Victoria as a "sex-mad teenager," angry at her mother and spreading scandalous rumors about one of her mother's ladies-in-waiting. The tales are entertaining, but Hughes's real achievement is historical—amounting to a new understanding of, as she puts it, "what it meant to be a human animal in the nineteenth century."

vernacular that people—who "are nothing if not multiple vectors of desire"—sometimes adopt when the attempt to wrestle those multifarious forces into a coherent self proves too much. "The Recovering" is about Jamison's familiarity with that language and about the many writers who have spoken it before her. Jamison also recounts the stories of people she meets, especially in the twelve-step groups she joins. With these nested narratives, she expands the world of her book in a bid to overcome the essential limitation of the recovery genre—that, as she acknowledges from the outset, a story about addiction "is always a story that has already been told," one that comes down "to the same demolished and reductive and recycled core: *Desire. Use. Repeat.*" Addiction makes not just for clichéd writing but for a clichéd life: it is a narrative-deficit disorder.

Before Jamison was an alcoholic, she had anorexia, but these two afflictions, she concludes, are not as different as they might seem. "Starving myself meant resisting an endless longing and drinking meant submitting to it," she writes. So, too, with love, or at least her wish to be loved. "My desire to be wanted was like something physically gushing out of me—*need need need*—and it disgusted me, this broken spigot I'd become. A man telling me he wanted to fuck me, whispering it into my ear, it was like a sip of whiskey."

Men, food, drink: she's only trying to satiate "the wild animal of need." To be John Barleycorn's subject is always to know what to do when the animal growls—give it a drink. That drink had other rewards: intoxication, extremity, and the feeling that drinking "plunged me into a darkness that seemed like honesty . . . as if the bright surfaces of the world were all false and the desperate drunk space underground was where the truth lived." It's easy to see how irresistible this effect would be to a writer like Jamison, whose spelunking often seems as compulsive as it is revelatory. Beyond fuel for truth-seeking, booze also provided her what it had given to London: membership in a club to which she badly wanted to belong—in her case, the fraternity of writers, especially those who gathered at the Iowa Writers' Workshop, which she attended when she was twenty-one.

"The myths of Iowa City drinking ran like subterranean rivers beneath the drinking we were doing," she writes. It was a place haunted more than most by the ghosts of famous alcoholic writers. There was "Raymond Carver and John Cheever tire-squealing through early-morning grocery-store parking lots to restock their liquor stash; John Berryman opening bar tabs on Dubuque Street and ranting about Whitman till dawn, playing chess and leaving his bishops vulnerable; Denis Johnson getting drunk at the Vine and writing short stories about getting drunk at the Vine."

Some of the Iowans—Carver and Johnson, for instance—managed to stop drinking and keep writing. Others drank to the bitter, and often premature, end. (A 1967 *Life* profile of Berryman valorized "whisky and ink" as the essential fluids of his life. Five years later, he threw himself off a Minneapolis bridge.) They all made the same mistake, Jamison thinks, the same one she once made: believing that "the drama of enthrallment" was "something worth writing about." Inevitably, the drama falls short. Thrall becomes subjection, and the beast turns out to be not so much contained as imprisoned. "Drinking," she writes, "is a thwarted flight into transcendence, like a dog, chained to a post, barking at the sky."

None of Jamison's literary exemplars howl at the sky as furiously as Don Birnam, the writer-protagonist of Charles Jackson's best-selling 1944 novel, "The Lost Weekend." He hurls himself against the walls of his alcoholism with mighty force but never breaks through. At the end, he crawls into bed with a drink, thinking, "No telling what might happen next time but why worry about that?" Hollywood had different ideas: when the movie version came out, the following year, it ended with Birnam dropping his cigarette into his whiskey and rolling a fresh sheet of paper into his typewriter, ready to begin writing the story we'd just seen. Jackson hated the film for this, because it implied "that I overcame my drink-problem by writing a book about it & thus getting it out of my system." Indeed, after the success of "The Lost Weekend," Jackson continued to drink on and off until he died, from a barbiturate overdose, at the age of sixty-five. Writing had not redeemed him, and he did not want anyone, including himself, to be deluded into thinking that it had, or that it could.

The addict's life, Jamison says, "thwarts the impulse to narrate self-awareness as salvation" by turning the writer into an unreliable narrator of her own life. It's a point she illustrates most vividly with "A Drunkard," Elizabeth Bishop's poem about a childhood incident in which her mother was handing out food to the victims of a fire. "I was terribly thirsty but mama didn't hear / me calling her," Bishop writes. The next day, back at the scene of the fire, she finds a stocking in the debris and shows it off to her mother, who chastises her for picking it up. She goes on:

> But since that night, that day, that reprimand
> I have suffered from abnormal thirst—
> I swear it's true—and by the age
> of twenty or twenty-one I had begun
> to drink, & drink—I can't get enough.

It's a good story, Jamison says—"that thirst might rise from an abiding longing for the one who would not come, that hunger becomes constitutional in the shadow of absence or departure"—and it may be comforting to those who believe that this kind of story will redeem us from our own history. But Bishop does not want us to think that she is released by this epiphany, and she ends the poem with a jarring confession: "As you must have noticed, I'm half drunk now . . . / And all I'm telling you may be a lie." Whatever tale she has fashioned, it is inadequate to the simple fact of her abnormal thirst. Chained to alcohol, she can only bark at the sky.

"It had long since ceased to matter Why," Don Birnam thinks near the end of his lost weekend. "You were a drunk; that's all there was to it. You drank; period." Tell the most comprehensive and glittering story you can about it, your addiction still won't loose its grip on you. The sheer brute fact of it is the only one that matters. There's nothing beautiful or transcendent about that story, and you are not its author.

Neither are you the author of the story that, according to Jamison and millions of others, may set you free—nor, evidently, is anyone else. "Alcoholics Anonymous," better known as the Big Book, lists no author on its title page, and it is written in the first person plural, as if by a management committee. This collective voice sounds much like mid-century American strivers who found their careers derailed by drink, their go-to virtues—determination, diligence, hard work—no match for their craving, and their lives teetering toward "the annihilation of all things worth while." The Big Book devotes one chapter to "the wives of men who drink too much" and another to "agnostics," whose "biased and unreasonable" devotion to the "God of Reason" prevented them from seeing that God was "as much a fact as we were." Otherwise, the book seems targeted directly and unabashedly at white, churchgoing, middle-class American men—no accident, since to the extent that the book was written by a specific person it was by Bill Wilson, a white businessman who finally achieved sobriety when he fell in with the Oxford Group, a Protestant sect that embraced group confession of moral failure as a kind of storytelling that can lead to salvation.

None of that prevented Jamison from feeling "seen through and chord-struck" when she first encountered the Big Book. She was in Iowa City for the second time, working at a bakery while her boyfriend attended the Writers' Workshop. She had tried twice to stop drinking, but resisted going to A.A. meetings "because it seemed like an irrevocable threshold." Finally, with her relationship on the line—and having developed a heart condition that required medication rendered ineffective by alcohol—she walked in. Attending meetings meant learning a new dialect: cliché. Jamison bridled at the Big Book's levelling platitudes, not only for their aesthetic offenses but because of the sentiment that allowed them to become the watchwords of the recovering life—that addiction makes no exceptions for individuals, so slogans apply equally to all. A.A.'s "insistence that we were all the same . . . was basically a way of saying *fuck you* to my entire value system," she writes. "My whole life I'd been taught that something was good because it was original—that singularity was the driving engine of value."

Even so, the Big Book resonated with



her, as it does with so many others, most likely because it offers an accurate phenomenology of alcoholism: the benders and their aftermath, the endless cycle of craving and slaking, the bobbing and weaving of the alcoholic determined to maintain the fiction that he remains John Barleycorn's master. The book also grants alcoholics company, and its first-person-plural voice assures them that they are afflicted with one of the myriad illnesses to which all of us are vulnerable. As a doctor informs readers in an introductory chapter, alcoholism is not the result of a character defect but the "manifestation of an allergy" that makes people uniquely unable to control their drinking.

That theory, or any theory that addiction is a disease in the conventional sense—a form of suffering with a biological cause—remains theoretical. Strong familial links have been established, and there are differences in brain chemistry between addicts and nonaddicts, but these remain correlational, and plausibly the result of addiction rather than its cause. As metaphor, though, the disease model works: addiction makes non-negotiable demands, as any illness does; the addict must face the fact that he can't bargain with alcoholism any more than he can bargain with cancer. "Human resources, as marshaled by the will," as the Big Book says, are not enough to overcome it, and only when the addict realizes this and turns his life over to a higher power can he do what he must to prevent annihilation—stop drinking forever.

But the Big Book's beef with will power is not limited to its inability to free us from addiction, nor are addicts uniquely lacking in it. If alcohol, or any other drug, is enough to blow us so disastrously off course, then free will must not be all it's cracked up to be. "Any life run on self-will can hardly be a success," the Big Book says. The trouble with alcohol lies not in the bottle or in our organic chemicals but in ourselves, and not in our individual constitutions but in the misbegotten conception of self under which each of us labors: that we must be the authors of our own life stories. We all suffer from these high expectations, alcoholics no more or less than anyone else. But they have encountered the limits of self-will in a particularly dire way. The cure is to get over themselves, to become anonymous.

As consolation, the Big Book offers "release from care, boredom and worry. . . . Your imagination will be fired. Life will mean something at last." For Jamison, this consolation, at least at first, seemed inadequate. "I could remember sweating straight rum onto my sheets, kissing a man at dawn with coke crackling through my veins, getting woozy on a lawn full of fireflies. That was *living*," she thinks as she attends a "sober ladies' night" in Iowa. "This night was several kinds of casserole." After an evening of parlor games, she finds herself wondering what it would be like to get drunk with these women, only to find that "the din and revelry of that impossible night was like noise from another room, something muffled behind a door." She's not sure that she can hold out until what she finds in the A.A. rooms is as attractive to her as whatever is going on behind that door—or as whatever goes on in her own singular head.

Other recovering writers have struggled with the same worry. Charles Jackson described his time in A.A. as "years of a kind of grey, bleak, empty well-being" consisting of "apathy, spiritlessness, blank sobriety, and a vegetable health." Recovery, especially recovery achieved through and buttressed by sloganeering, may not fire the imagination after all, at least not in the way a writer needs. The expectation that renunciation will pay off in inspiration, Jamison realizes, is only a version of the larger "contract logic" by which we live—the idea that if we just figure ourselves out we will be rewarded. That expectation, she concludes, "involved its own tyrannical authorial impulse—*I will write the script, and God will make it come true*."

Sobriety does not uphold its end of the bargain. But, as Jamison discovers, it provides something better: "relief from my own plotline." Stilling the tyrannical authorial impulse, it gains salvific force, transmuting cliché into liturgy. "Submitting myself to the clichés of recovery was another way of submitting to its rituals—gathering in basements, holding hands in circles," Jamison writes. "There was something illuminating, something even like prayer, in accepting truths that seemed too simple to contain me."

Addiction may rob us of autonomy, but to slip its chains is not to be free of all constraints. What the A.A. version of recovery offers is an alternative to the modern idea that we must fashion our lives out of self-knowledge. "I'd come to worship self-awareness," Jamison writes, and this "brand of secular humanism" has its own misguided slogan: "Know thyself, and act accordingly." But "what if you reversed this? *Act, and know thyself differently*. Showing up for a meeting, for a ritual, for a conversation—this was an act that could be true no matter what you felt as you were doing it.

Doing something without knowing if you believed it—that was proof of sincerity, rather than its absence." Or, as the A.A. slogan goes, "Fake it till you make it." Leaping into the A.A. ocean, Jamison finally finds a way of disappearing without destroying herself.

Or so she says. Despite itself, her book tells a different story. Not about her sobriety—about how hard-won it was, how necessary to her survival as both a writer and a woman—but about the value of a story that isn't unique at all. Jamison is concerned from the outset that her book will not escape "the tedious architecture and tawdry self-congratulation of a redemption story"—that it will, in short, be boring. She needn't have worried; such is her command of metaphor and assonance that she could rivet a reader with a treatise on toast. We perhaps have no writer better on the subject of psychic suffering and its consolations.

But the book does flag, tellingly if briefly, when, near the end, she turns the story over to fellow-addicts, in particular four people she tracks down who had once passed through Seneca House, a "rag tag rehab" established in the nineteen-seventies in a converted motel on the banks of the Potomac River in Maryland. As she talks with them, more than forty years after they got sober, "the ghosts of old dramas set up shop in the banality of the present, in living rooms and coffee shops: memories of hair stringy with vomit, nights in jail, crack in White Plains, white lightning in Monrovia, children driven over bridges during blackouts." Jamison sees the danger that these stories pose to her project—that they will fall flat where her own story (and those of the writers she takes up) soars. As if to prepare us, she explains that even if a story has been "polished by repetition, whittled into artifact—that doesn't mean it doesn't also hold truth." It may be predictable, but in this sense the recovery story provides only "a series of generative formal constraints."

Accompanying Jamison on her flight to discover those constraints is thrilling, if often harrowing. But the stories of others seem to weigh her down, and the tedium she fears begins to find its way into the book. Perhaps this is due to the contrast between her way with words and theirs, or between her talents as a memoirist and as a reporter. But, although she interrogates herself relentlessly, she seems content to let her subjects rest in their "practiced narrative grooves." And when she does question one of them the result is a jarring reinforcement of the A.A. ideology, one that seems to come at the subject's expense.

Gwen—Jamison changed the names of the interviewees—was a Seneca House patient who went on to become its director, and who, in the midst of trying to get insurance accreditation for the facility, and organizing her son's wedding, became overwhelmed and broke down in tears at work. It happened only the one time, Gwen tells Jamison, but she came to work shortly afterward to find a group intervention awaiting her. Many years later, it still smarts, this insistence that her tears signified a disease that had among its symptoms her inability to know she was sick—and for which the only cure was more rehab. Jamison offers a diagnosis of Gwen's ongoing resentment: "It was clear that there were certain kinds of vulnerability that Gwen had readily admitted into her narrative . . . and other kinds she hadn't fully metabolized." But maybe what Gwen had failed to metabolize was an injustice meted out by her friends and colleagues, who were convinced that her passion was pathological. Denial may not be a river in Egypt, as the A.A. catchphrase goes, but it can be a way to shut people up when their story ventures outside those formal constraints.



Jamison is not blind to the ideological implications of the twelve-step logic, the way that it forces everyone to read from the same script. Indeed, she's preoccupied with it, but largely as an aesthetic problem; it's not until an author's note at the end of the book that she explicitly connects that ideology to deeper problems with our understanding of suffering. In the note, she points out that A.A.'s insistence on universal abstinence—not just from the problem drug but from all drugs—has interfered with medication-assisted treatments like buprenorphine for opiate addiction, and serves to justify various cruelties of the drug war: the court-ordered drug testing that often lands illicit-drug users in prison, the obstruction of needle-exchange programs, the unavailability of Narcan for first responders. Even then, Jamison does not confront the way that this inflexibility arises from the foundation of A.A. doctrine: not merely the belief in abstinence but the suspicion of autonomy that is embedded in the idea of turning our lives over to a higher power.

A.A. has ridden to hegemony on some of our strongest cultural winds: Protestantism, self-improvement, abstemiousness, scientism. Its offer of fellowship in a fraternal order of the wounded gains appeal as injury increasingly becomes the polestar of identity. The "tyranny of abstinence," as Jamison calls it, has surely saved many addicts; it beats blackouts and wrecked lives hands down. (Jack London continued drinking until his death, at age forty, just three years after "John Barleycorn" was published, and possibly the result of an overdose of the morphine he was taking for his kidney disease.) But it's still tyranny, and tyrants thrive on cliché, on language that declares itself beyond questioning.

It may be instructive that the cure for addiction is to trade in one tyrant for another. Tyrannies seem to be on the march; this may reflect a yearning for something outside ourselves, something to relieve us of the burden of fashioning our own plotlines out of the thin air of our lives, or of sorting out the competing stories that increasingly are falling on us like a poisoned rain. Our narrative engines may not be up to the task of making sense of our yearnings, and we may find ourselves unyoked from them, and leashed to someone else's. In the meantime, the irreducible stories of individuals, such as the one Jamison tells about herself—the great and prickly autobiographies of addicts struggling to understand their thrall and teaching us about ourselves in ways beyond what they intend—may be the best balm against our inadequacy that we have. ♦

BOOKS



You're Too Much

Nothing succeeds like excess in Christine Mangan's "Tangerine."

BY LAURA MILLER

The pleasure of reading novels comes in assorted flavors, and one of them, certainly, is nostalgia. This is the craving satisfied by Christine Mangan's début, "Tangerine" (Ecco), the story of two women, former college roommates, who are reunited in Tangier in 1956. Alice Shipley, psychologically fragile since the deaths of her parents in a house fire when she was an adolescent, is married to John, who does something vaguely secretive for "the government." Lucy Mason, a scholarship girl who bonded with Alice as a fellow-orphan during their freshman year at Bennington College, has ditched her job typing manuscripts for a publisher in New York and appeared without advance notice on Alice's Moroccan doorstep. Also unannounced is Lucy's plan to pry Alice out of her marriage and carry her off for a series of globe-trotting escapades like the ones the two of them imagined together back in their clapboard house in Vermont.

"Tangerine" is full of allusions to other books and writers. Lucy grills the glad-handing John about the Brontë sisters at the bar to which he drags the two women on the day she arrives in Tangier. Shirley Jackson, whose husband, Stanley Edgar Hyman, taught at Bennington, is referred to during a campus flashback. The novel employs devices borrowed from Patricia Highsmith's books, those ruthless tales of unstable, swappable identity. But the prevailing influence is Daphne du Maurier, who translated the motifs of "Jane Eyre" into a set of twentieth-century-ready tropes with her masterpiece, "Rebecca," a novel that, like the woman who wrote it, has been critically underrated and popularly adored since its publication, in 1938. "Tangerine" is no "Rebecca," but, for a certain type of reader, it recollects the host of novels that "Rebecca" inspired, the sort of book—written, perhaps, by Phyllis A. Whitney, Dorothy Eden, or some other now forgotten best-selling author—that a bored thirteen-year-old might find on the shelves of a sleepy suburban branch library, bound in the waxy-feeling buckram of special library editions and with the title stamped on the spine in white Gothic Bold type. Although these books seemed to be read mostly by middle-aged ladies who used needlepoint bookmarks, for a certain generation of girl readers they provided a palatable introduction to "grownup" fiction in the same way that science fiction did for many of their male counterparts. In the pages of these books, you could find handsome men who were also (sometimes) wicked, and marriages that did not amount to happily ever after. At the high end, the genre was called "romantic suspense," and at the low end—drugstore paperbacks on whose covers distressed women in nightgowns cowered before big, spooky houses—the novels were "gothics."

Mangan is described in her author's biography as having written a thesis on eighteenth-century gothic fiction, but that is a different literary genre from its mid-twentieth-century pulp namesake, more inclined to the supernatural and the grotesque, and more closely related to horror. "Tangerine" flaunts a mélange of influences, none of them particularly gothic in the traditional sense. The exotic period setting harks back to the vicarious wanderlust of romantic suspense: Whitney set her novels in Santa Fe, Japan, and other picturesque locales. This novel's chapters alternate between the first-person perspective of Alice, who is established early on as being prone, when anxious, to hallucinate "strange wispy apparitions," and that of Lucy, whose obsession with her former roommate seems unhealthy. Because Alice has such a faltering grip on reality and Lucy willfully denies reality, both make for

ILLUSTRATION BY ELENI KALORKOTI

unreliable narrators—a common device in the currently hot publishing genre of psychological suspense (Gillian Flynn's "Gone Girl," Paula Hawkins's "The Girl on the Train"). Add to this the novel's focus on an engulfing and possibly toxic friendship between two women—Elena Ferrante territory—and "Tangerine," despite its old-fashioned aspects, seems very much on trend.

"Tangerine" works best when Mangan juggles the untrustworthiness of her two narrators, writing and then rewriting their history together. Lucy remembers their first couple of years at Bennington as an idyll of hot chocolate by the fireplace and dreams of gallivanting in Paris and Budapest, but Alice's recollections are more uncertain. After Alice began dating a boy from a neighboring school, Lucy's behavior grew, in her view, bizarre. One day, Alice came home to find Lucy dressed in Alice's clothes, "everything, from head to toe." This confirmed Alice's growing discomfort with their claustrophobic intimacy, and freaked her out. Later, Lucy remembers the same incident as a pathetic attempt to seek comfort in the kind of closeness from which Alice had begun to retract. Alice also remembers a day when Lucy appeared wearing Alice's mother's charm bracelet, insisting that it was hers, a gift from her own mother. But then, the following day, Lucy behaved normally again, claiming that she hadn't seen the bracelet since Alice last wore it and promising to help her look for it. Alice herself can't be sure if she remembers any of this correctly, and nothing Lucy recounts from that period even remotely suggests that she'd do anything so cruel and alienating to the girl she adores. Each woman recalls feeling incomplete or insufficient without the other. "I coveted the easy way she had, and I desired that: her way of being. I wanted it for my own," Alice remembers. She believes that the proximity of Lucy gives her self-confidence. And even the bolder Lucy remarks, of Alice, "Without her, my own sense of self had wavered."

Lucy is right about Alice's miserable marriage, even if Alice hesitates to admit it at first. John loves Tangier, but Alice does not. She almost never leaves their flat, overwhelmed by the North African heat and light, and by the city's crowds. "Tangier seems to attract a certain type," she observes to Lucy, "and I'm afraid that I don't generally fit the description." Lucy, on the other hand, dives in, sightseeing and roaming the souks, "considering and haggling." She wears Capris, frequents cafés, and hangs out at the foreign bookstore, befriending Youssef, a local man, even though John warns her that he has a reputation for grifting tourists. From Youssef, Lucy receives confirmation of what she has come to suspect since she glimpsed John in a bar, running his hand up a dark-haired woman's thigh: he is having an affair. This, she believes, is the wedge that she needs to drive husband and wife apart, but it won't be easy; the profligate John depends on the income the couple receives from Alice's family trust. The romantic triangle that forms the kernel of the novel, a juicy melodrama cast against the sultry, stylish imagery of North Africa in the fifties, is surely what led Hollywood to acquire the film rights to it, with Scarlett Johansson attached to star.

A movie can rely on Tangier itself to provide the atmosphere. For a novel that leans so heavily on its setting, "Tangerine" rarely succeeds at evoking more of Tangier than its heat, its humidity (or dust), its "confined and chaotic streets," and its sweet mint tea. This, the novel's biggest weakness, is largely a failing of Mangan's prose, which tends to be general rather than specific, lofty rather than grounded, received rather than observed. Whether Lucy or Alice is narrating, Mangan's diction has the archaic gentility of someone incorrectly imagining how previous generations thought and spoke. The novel's action takes place as Morocco gains its independence from France, an event that John, despite his sympathy for the cause, flippantly characterizes as "The natives are getting restless, my dear." The conversation in this scene has the artificial quality of dialogue from a forties Hollywood film. ("Oh, don't talk about it like that," Alice protests.) John's remark is meant to peg him as insensitive, but that's all that the momentous change in the nation's status is for "Tangerine": a distant, colorful backdrop providing thematic echoes of the intrigue on center stage. When Lucy first meets Youssef, he tells her, "If you are looking for a place that makes sense, I feel I must provide this warning—you will be disappointed. . . . This is Africa, after all." It's a line that could be plausibly delivered only by Sydney Greenstreet.

"Tangerine" is undeniably hokey. The first few chapters ladle on the foreshadowing, with portentous references to "what had happened in the cold, wintry Green Mountains of Vermont" on "that terrible night"—the cause, evidently, of an estrangement between Lucy and Alice. Alice, Lucy thinks, moves like "a caged and frightened bird." Hearts pound, breath catches in throats, gazes are penetrating, panic comes in a rising tide. But these clichés do not detract from the enjoyment the novel offers; they are, paradoxically, part of its charm. "Tangerine" is not a book about real people and how they feel or behave but a book about other books, and a few old movies, a concoction of familiar yet also reliably fun fictional gestures.

Reading it reminded me of an evening a few years ago when I talked a friend into watching the 1942 Bette Davis vehicle "Now, Voyager." I'd looked forward to sharing it with her, but her response was bemused. What, she asked, could I possibly see in a film so preposterous and stylized, so retrograde? I was stumped, unable to explain the delight I take in the movie's glossy nonsense, in Davis's makeover from a meek frump bullied by her mother into a slim, chic siren, gazing out at a sparkling sea with Paul Henreid from the deck of an ocean liner bound for Rio de Janeiro. What could be more idiosyncratic than my fondness for the very aspects of the film that someone else could legitimately complain about: its naked, conventional wish fulfillment, its fetishization of self-sacrifice, and Davis's fiercely mannered performance?

Let me try again: It's the fierceness itself, the gusto with which banal human problems—an awful mother or a philandering husband, adulterous longings or a schoolgirl crush—are heightened into glamour and tragedy, that is the soul of melodrama. "Tangerine" is over the top, but it is also endearing and even impressive in the force of its determination to conjure a life more exciting than most lives are. It's not Tangier that the novel summons but the desire for Tangier, less a city than a blurry reverie of romance and adventure. It requires readers already infected with such daydreams, but when it finds them it will be just the ticket. ♦

THE ART WORLD



Living Color

The bodies on display in the Met Breuer's sculpture show.

BY PETER SCHJELDAHL

"Like Life: Sculpture, Color, and the Body," at the Met Breuer, is a mind-blowing show in good and, while not bad, pestiferous ways: hypercharged with sensation and glutted with instruction. I am torn between praising it as visionary (and also a great deal of fun, what with entertainments including a voluble animatronic savant) and reporting it as a mugging to the taste police. I guess I'll do both. A hundred and twenty-seven almost exclusively European and American renditions of human bodies, from very old to recent and from masterpieces to curios, elaborate the thesis that colored figurative sculpture has been unjustly bastardized ever since the Renaissance canonized a mistake made during its excited revival of antiquity. The whiteness of surviving Greek and Roman marbles, their original polychromy lost, became de rigueur for Western three-dimensional figuration in subsequent centuries.

Painted sculpture, which had been common in medieval churches, dwindled to the margins of vulgar use, such as in carnivals and religious processions, and decorative embellishment, as with ceramic figurines. The error was widely recognized by the eighteenth century, but the rule of chaste monochrome persisted well into modern times, even as modernism suppressed figurative imagery. (In the nineteen-sixties, the critic Clement Greenberg, acting as the executor of the estate of David Smith, removed paint from some of the great sculptor's abstract works, thinking thereby to improve them—a scandal germane to the present occasion, though not cited.) Why?

Lord knows the show's curators, led by the Met's Sheena Wagstaff and Luke Syson, go into that question, with edifying wall texts and erudite catalogue essays. The answer may come down to a resilient compound, in élite culture, of Platonic idealism and run-of-the-mill snobbery. Color—apart from its proper sphere in painting—was deemed philosophically base and socially uncouth. But the show's blizzard of ideas drifts in so many directions, variously philosophical and political and historical, that it doesn't come down much of anywhere.

To contemplate the displayed works is to fight off regarding them as discursive illustrations. (On my first visit to "Like Life," I was politely redirected by a press officer from my commenced ramble to the prescribed sequence—which, on my second visit, I made a point of viewing in reverse.) You may disagree, relishing an effect, at once scholarly and populist, like that of a TED talk. Anyhow, go see. The show is a cornucopia with something, or many things, for everyone. As a curatorial phenomenon, it may well establish a model for attendance-hungry museums, never mind ingrate aesthetes like me.

Seven thematic sections, or chapters, segment "Like Life." Each incorporates both old and new works to address some issue, per the Met's press release, of "gender, race, class, sexuality, and religion over seven hundred years." For the record, the sections are titled "The Presumption of White," "Likeness," "Desire for Life," "Proxy Figures," "Layered Realities," "Figuring Flesh," and "Between Life and Art." I lack both the space and the heart to paraphrase the respective analyses, which for the most part are cogent but feel really on target only for lesser works, which derive their content more from the collective bias of their times and places than from the individual character of their makers. Good art is irreducible to attitudes, and great art demolishes them.

Those distinctions come hard in the show, which does maintain fairly lofty standards of quality but logically needn't. "Likeness" could smoothly extend its embrace to Madame Tussauds, and "Desire for Life" and "Between Life and Art" might comfortably confer at any of the crowd-pleasing commercial exhibitions of flayed and plasticized actual corpses, often in action poses, that have travelled the world in recent years. Hints toward the latter include the remarkably grisly "Anatomical Venus"—an anonymous Italian creation, from 1780-85, of a lovely damsel laid wide open from throat to crotch—and the " 'Auto-Icon' of Jeremy Bentham" (1832). On a chair, the realistic figure—wax-faced, jauntily clothed, sporting a cane—contains the British

"Housewife," from 1969-70, is one of Duane Hanson's hyperrealistic tableaux.

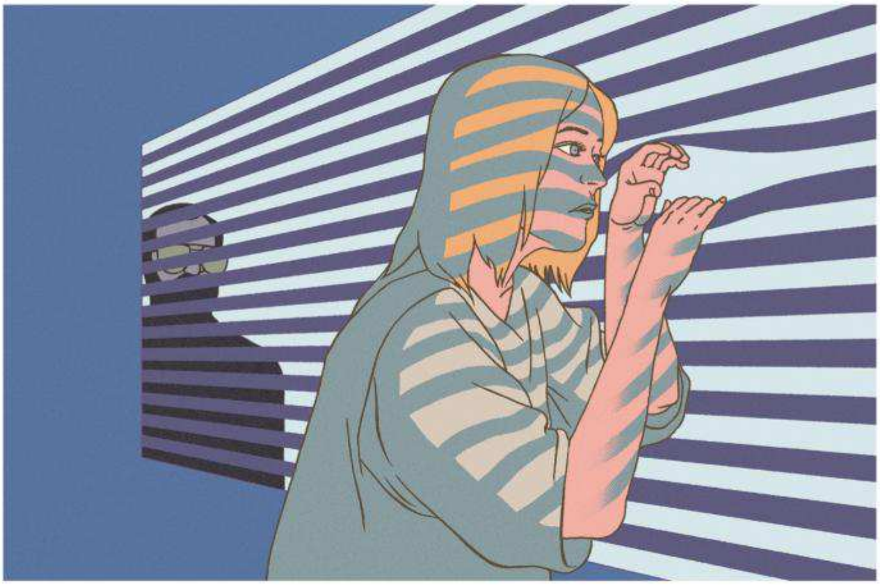
utilitarian philosopher's skeleton. (Bentham had willed his seated burial for reasons that included not wanting to be absent from meetings at University College London, which has lent it to the show.)

Great works on hand—by which I mean ones that, like them or not, lastingly transcend the types of their form and style—range from an anonymous German's "Nellingen Crucifix" (1430-35) and Donatello's "Bust of Niccolò da Uzzano" (from the fourteen-thirties) to Jeff Koons's "Michael Jackson and Bubbles" (1988) and Charles Ray's "Aluminum Girl" (2003). You won't forget the deep wound in the side of the crucifix's emaciated Jesus, emitting gore and surrounded by a blue bruise. The artist left God's share in mortal agony as little to the imagination as wood and paint could communicate. Nor is it easy to shake off the canny glitz of Koons's porcelain singer and monkey. The Met curators have staged a visual coup by pairing it with a fabulous Meissen porcelain figure group, "The Judgment of Paris" (circa 1762), but the kinship is shallow. Outrageous luxury is only one element in Koons's masterly fusion of Pop content and minimalist aesthetics, which prophesied and still authorizes the cultural aplomb of our reconstituted, remorselessly ongoing gilded age.

My favorites are the Donatello and the Ray. The former may have been based on a death mask of its eponymous Florentine politician, but no livelier material object exists. Life-size, the subject turns his head upward on his sinewy neck with a hooded gaze that seems mildly interested, slightly supercilious, and ripe with a thought that is an instant short of being spoken. I imagine him seated and attending to someone, standing, whose measure he has taken. The colors of the face, which feel irradiated by the light that falls on it, are so unusual in Donatello's known body of work that some have questioned the attribution. But we would know, and revere, the name of anyone else so accomplished; and Donatello was notably unconstrained by stylistic consistency.

I had an admittedly crazy sense, when encountering the white-painted life-size nude "Aluminum Girl," that it both stands apart from and is equivalent in significance to the whole rest of the show. That's a magic that the Los Angeles artist Ray, now sixty-five years old, brings to figurative sculpture: investing deadpan realism with an aura of timeless form. Any subject will do for him—the representation of a collision-wrecked car is among his major works—but bodies hone his point. I take this to involve a profound understanding of Greek classicism as the obsolescence-proof and unbetterable compromise of observed realities and dreamed ideals. The girl's whiteness, at once a color and a refusal of color, isn't just a quality. It's an intended subject fortuitously anticipating that of the show, one to be considered along with the subtly generalized features of her face and body—machined from a solid block of metal, in a process that took Ray years to complete. She stands, as we do, flat on the floor, but feels as remote as the moon. Rather than a kind of art, the work strikes me as art defined, not a whit less nor more than art can be.

"Like Life" is beautifully installed, I should report, and its selections breathe connoisseurship, albeit of a committee-negotiated sort. The works convince as probably the best of what could be obtained in categories of statue, relief, tableau, funerary figure, reliquary, portrait, altered mannequin, lay figure (a jointed wooden model used by an artist), decorative element, doll, and the odd avant-gardist conceptual whatsit, deployed in combinations to substantiate themes and traditions. The effect is rather forensic—creations as symptoms, in service to knowledge more than to experience. But you could be like me and sift the contents to curate your own show. Mine prominently includes, alongside the pieces I've already mentioned, works by Edgar Degas ("Like Life" might justly be picketed were it lacking "The Little Fourteen-Year-Old Dancer," modelled circa 1880 and cast in 1922), Augustus Saint-Gaudens (poignant busts in white marble and in pigmented wax, made in the mid-eighteen-nineties to memorialize the deceased young wife of a patron), Auguste Rodin (the uncanny glass "Mask of Hanako," depicting the face of a Japanese actress, from 1911), and Duane Hanson (from 1969-70 and 1984, hyperrealistic tableaux, starring a frowsy working-class housewife and a weary housepainter, that curiously become ever more affecting as their period looks recede in time). Now, your turn. ♦



Unusual Suspects

"Unsane" and "Gemini."

BY ANTHONY LANE

There is a lovely photograph of James Mason and Eva Marie Saint on the set of "North by Northwest" (1959). They are clad for the auction scene; he wears a pale-gray suit, and her dress is rich in roses. He holds her lightly by the arm, smiling, as she stands behind the camera on which the sequence will be filmed. And what a formidable beast that camera is: as big as a motorbike but far less streamlined, bearing on its broad flank the legend "VistaVision"—the wide-screen format in which Hitchcock also shot "To Catch a Thief" (1955), "The Man who Knew Too Much" (1956), and "Vertigo" (1958). James Wong Howe, a king among cinematographers, used VistaVision on "The Rose Tattoo" (1955), and there's a portrait of him with a similar camera, which towers above him on its wheeled crane, and which he holds by a cable, as if leading a velociraptor through Jurassic Park. Howe, like Hitchcock, knew that the cumbersome effort was worthwhile, for the result would be a rolling expanse of fine-grained images, filling the audience's gaze. Such beauty could be summoned by the beast.

And so to the news that Steven Soderbergh, never one to shy from experimentation, filmed his latest work, "Unsane," on an iPhone 7 Plus—on three iPhones, in fact. (Not that he is the first to go down this route; Sean Baker used an earlier-model iPhone, in 2015, to make "Tangerine.") The practical benefits of carrying your main creative tool around in your breast pocket are fairly clear; "Unsane" was reportedly shot in just over a week. In interviews, Soderbergh has rhapsodized over this liberating method, and sworn to employ it on projects to come. "I think this is the future," he says, describing the look of the movie as "velvet." You could have fooled me. I found it as coarse as canvas, though you have to admire Soderbergh for adding a new vista to his vision.

"Unsane" tells the story of Sawyer Valentini (Claire Foy). Anyone with a name like that can kiss goodbye to a quiet life, yet that is what Sawyer has pursued, by moving to an unfamiliar city and getting a job as an analyst in a bank. Suffering from panic attacks (a Tinder date goes wretchedly wrong), Sawyer seeks help—nothing special, a brief consultation during her lunch hour—at Highland Creek, a mental-health facility. She is asked to complete a form, and, if the movie has a message to impart, it is this: always read the fine print. Unwittingly, though voluntarily, Sawyer has agreed to be committed. She's detained for only a day, but her protests are so militant that her stay is lengthened to a week. She winds up stuck in a padded cell, and the color of the padding, not a clinical white but an inky blue, somehow aggravates her ordeal, and stains it with the hue of a bad dream.

But could it *all* be a dream, or a delusion, and how weary are we of movies that persist in asking that question? It seemed hokey enough in 1930, in "The Laurel-Hardy Murder Case," at the end of which our heroes awake from a violent struggle. (The man they wrestle with, incidentally, enters dressed as a woman and brandishing a knife. Now you know what Norman Bates watched as a kid.) One lurid recent example is Martin Scorsese's "Shutter Island" (2010), which is set in an asylum for the criminally insane, and Soderbergh, like Scorsese, delights in the narrative opportunities that are afforded by mental illness. More viewers than ever will be discomforted by that delight, not least because of what triggers Sawyer's terror: in her former place of residence, she was stalked by a man named David Strine (Joshua Leonard), against whom she obtained a court order, and now she believes that he has come to Highland Creek as a nurse, with the specific aim of tormenting her afresh.

Claire Foy emerges with credit from this farrago. If you have found fame by portraying the Queen of England, as Foy has done in two seasons of "The Queen," there are few more effective ways of changing your tune than by playing a young American woman with a dirty modern mouth and a mind unschooled in regal stoicism. Is the emotional refrain of "Unsane," though, any

In Steven Soderbergh's film, Claire Foy plays a woman pursued by her fears.

 ILLUSTRATION BY MANSHEN LO

less constricting? In the role of Sawyer, Foy gets to yell, to fidget, and to fight—and, in a moment of primal release denied to Her Majesty, to stab someone in the neck with a sharpened spoon. Yet all these deeds are little more than variations on the theme of a damsel in severe distress. The performance that lingers, once the tale is told, is that of Jay Pharoah as Nate, a fellow-patient on Sawyer's ward, who has furtively kept hold of his cell phone (she was deprived of hers), and who lends the film an understated calm. Nate thinks that Highland Creek is running a murky racket, and a serious movie about mental disorder and the insurance business would be ten times clammier and more disturbing than "Unsane." For now, we have to be content with passing hints.

In the end, it won't be as a medical thriller that this movie will be judged, but as a showcase for the new technology, and it's certainly got the credentials. Soderbergh armed his iPhone with three lenses, and it's one of them, an 18-mm. wide-angle, that predominates in "Unsane," extending the depth of field and elasticizing the world so that it reflects the distorted consciousness of Sawyer—or, if you prefer, rigging the physical evidence to fit the plot. A hand, lying close to the camera, is the size of a giant's paw, and so frequently do people's faces loom and swell before us that I feared an outbreak of mumps. A little of this misshaping, to be honest, goes a long way, and it could be argued that smartphones won't really prove their worth, on the big screen, until they can fulfill more sober duties, showing sights unwarped by paranoia. A Western might do the trick. I can just imagine Soderbergh saddling up and trotting off to Monument Valley, a pair of iPhones tucked into his holsters. Come sundown, though, with the coyotes beginning to howl, where do you plug the charger?

After the jitters of "Unsane," the mood that settles on "Gemini," dopey and unrushed, is a relief. Aaron Katz's film is set in Los Angeles, where Jill (Lola Kirke) is the personal assistant to a movie star called Heather (Zoë Kravitz). For anyone raised on old-school notions of service, Jill's job—part valet, part sidekick, and part confidante—isn't always easy to figure out. Bertie Wooster, for example, rarely went back to Jeeves's apartment for a glass of St-Germain topped up with Mello Yello, and I'm pretty sure that Don Quixote, whatever his true feelings, never murmured "I love you" to Sancho Panza as they drifted off to sleep.

Jill's initial task, as the film gets going, is to do the dirty work. She must go into a restaurant, where a director named Greg (Nelson Franklin) awaits, and break the news to him that Heather is pulling out of his next project. Greg is unamused. From here, the two women mosey around—indulging a superfan, fending off paparazzi, driving to and fro, doing karaoke, and ending up at Heather's house. Amid the moseying, you sense that the night, with its noirish, narcoleptic glow, could go awry at any second, especially when a pistol is produced. ("How many movies have I shot a gun in?" Heather says, as if that were any kind of training.) Sure enough, the morning brings a killing, or, at any rate, a cryptic death. Jill, when questioned by a detective (John Cho), asks if she is under arrest. He replies, "Not yet."

The sour ghost that broods over "Gemini" is Nicholas Ray's "In a Lonely Place" (1950). One of the darkest tributes ever paid to L.A., it stars Humphrey Bogart as a Hollywood screenwriter who, like Jill, is suspected of a capital crime, in the wake of a long and talkative evening. His lip-curling scorn for the sins of his own soul, and for the business that sucked it dry, is echoed here, though largely by the minor characters: "I've got to get out of this poisonous town before I murder someone," Greg says, and Heather's agent, Jamie (Michelle Forbes), tells Jill, with crystalline candor, "I know that you and I kind of hate each other, but I actually quite like you." Jill herself, on the other hand, is a far less curdled creation, devoid of sneers. The role is hardly flattering; most of the time, she wears big jeans and a baggy gray top, while sporting the haircut from hell—brown bangs cut straight across, as if by a six-year-old with blunt scissors. At one point, in need of camouflage, she dyes the tresses blond but keeps the style. Talk about unsane. Kirke, however, who made such an impact, in "Mistress America" (2015), requires no disguise; she is sphinxlike enough as it is. The cracking of the mystery, at the conclusion of "Gemini," is daft and unsatisfying, but no matter. The case of Lola Kirke remains unsolved. ♦

NEWYORKER.COM
Richard Brody blogs about movies.

VOLUME XCIV, NO. 7, April 2, 2018. THE NEW YORKER (ISSN 0028792X) is published weekly (except for five combined issues: February 12 & 19, July 9 & 16, August 6 & 13, November 26 & December 3, and December 24 & 31) by Condé Nast, which is a division of Advance Magazine Publishers Inc. PRINCIPAL OFFICE: Condé Nast, 1 World Trade Center, New York, NY 10007. Chris Mitchell, chief business officer; Risa Aronson, vice-president, revenue; James Guilfoyle, executive director of finance and business operations; Fabio Bertoni, general counsel. Condé Nast: Robert A. Sauerberg, Jr., president & chief executive officer; David E. Geithner, chief financial officer; Pamela Drucker Mann, chief revenue and marketing officer. Periodicals postage paid at New York, NY, and at additional mailing offices. Canadian Goods and Services Tax Registration No. 123242885-RT0001.

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CARTOON CAPTION CONTEST

Each week, we provide a cartoon in need of a caption. You, the reader, submit a caption, we choose three finalists, and you vote for your favorite. Caption submissions for this week's cartoon, by P. C. Vey, must be received by Sunday, April 1st. The finalists in the March 19th contest appear below. We will announce the winner, and the finalists in this week's contest, in the April 16th issue. Anyone age thirteen or older can enter or vote. To do so, and to read the complete rules, visit contest.newyorker.com.

THIS WEEK'S CONTEST



"……………………………………………………………………………………"

THE FINALISTS



"I can't control the volume—the only thing I can do is open the windows."
Rebecca Gluskin, Brooklyn, N.Y.

"I see the radiator's Baroque again."
Alan C. Duncan, Cleveland, Ohio

"The hard part was transposing from C major to Fahrenheit."
Clair Cheer, Pacific Grove, Calif.

THE WINNING CAPTION



"O.K., but he is going to have to check that bag."
Bridget Fahrland, Portland, Ore.